



WOOTTON PARK

'Ipsum quod faciendum est diutius'

Knowledge Maps

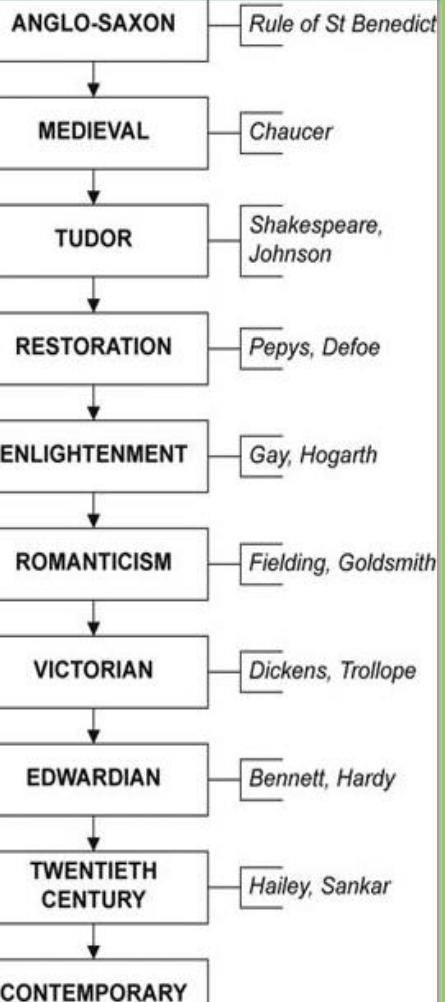
Target Grades **Developing** to **Exceptional Performance**

Year 7	Term 3
Your Name	
Your Email Address	

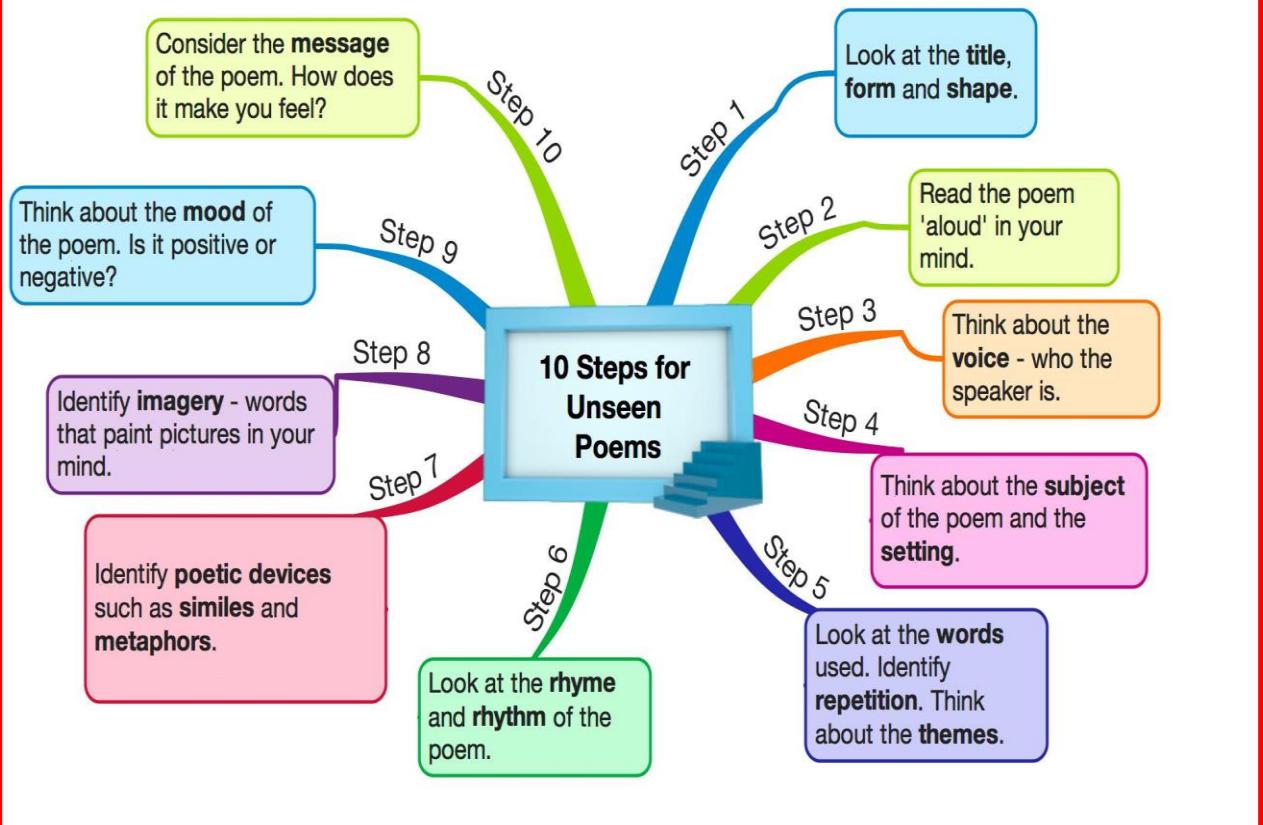
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Week 1 - Poetry Through the Ages Timeline



Week 2 – How to approach unseen poetry



Structuring your Analytical Paragraphs

- P: Make your point
- E: Use word/line from the poem to support your point
- A: Name the poetic technique used and discuss the why the poet has used it
- C: Has the poet been influenced by something happening at the time they were writing?
- E: Conclude your point

Revising Types of Poetry

<https://www.youngwriters.co.uk/glossary-poetry-types>

How to Analyse Poetry

<https://www.bbc.co.uk/education/topics/zccxp39>

Week 3 – Key Terms

POETRY TERMS

- Line-** A single line in a poem.
- Stanza-** The "paragraph" in a poem.
- Rhyme-** When the ending words sound alike
- Alliteration-** repetition of the same beginning sound
"seven snakes slither south of Sacramento"
- Repetition-**
 - I'm digging for diamonds.
 - I'm digging for gold.
 - I'm digging for rubies.
- Meter (rhythm)-** The beat of a poem (Sounds like a song).
- Sensory details (imagery)-** describing using the five senses.
- Verse-** A line of metrical writing.
- Hyperbole-** An exaggeration
- Simile-** compares two things using words "like" or "as".
"As sweet as honey" "As fast like a cheetah".
- Metaphor-** comparison saying one this "IS" another
"She is a mother hen" "He is the wind".
- Idiom-** phrase with hidden meaning.
- Personification-** giving human characteristics
"the teapot sang", "the shadow danced".
- Acrostic Poems-** Poems that use words to elaborate on the topic of that word.

Week 4 – Sonnet 116

A sonnet is a poem with:

- 14 lines Written in iambic pentameter
- 3 quatrains - Ends with a rhyming couplet

Sonnet 116

Let me not to the marriage of true minds
Admit impediments. Love is not love
 Which alters when it alteration finds,
 Or bends with the remover to remove:
 O no; it is an **ever-fixed** mark,
 That looks on **tempests**, and is never shaken;
 It is the star to every **wandering bark**,
 Whose worth's unknown, although his height be taken.
 Love's not Time's fool, though rosy lips and cheeks
 Within his **bending sickle's compass** come;
 Love **alters** not with his brief hours and weeks,
 But bears it out even to the edge of doom.
 If this be error and upon me proved,
 I never writ, nor no man ever loved.

William Shakespeare



TRANSLATION

I hope I may never acknowledge any reason
 why minds that truly love each other shouldn't be joined
 together.
 Love isn't really love if it changes
 when it sees the beloved change or if it disappears when
 the beloved leaves.
 Oh no, love is a constant and unchanging light
 that shines on storms without being shaken;
 it is the star that guides every wandering boat.
 And like a star, its value is beyond measure,
 though its height can be measured.
 Love is not under time's power,
 though time has the power to destroy rosy lips and cheeks.
 Love does not alter with the passage of brief hours and
 weeks,
 but lasts until Doomsday.
 If I'm wrong about this and can be proven wrong,
 I never wrote, and no man ever loved.

Week 5 – William Blake and the Industrial Revolution

- Born in London, 1757
- Wrote poems about every day life and the changes that were happening in society.
- He was worried and concerned about children being treated badly.
- He rejected the church and religion.
- He thought the “industrial revolution” was having harmful effects on people.

Life during the industrial revolution

- People moved from the countryside to large towns
- People got jobs in factories
- They bought their food rather than grew their food
- Trains meant people could travel all over the country
- Cities were dirty and crowded
- People had to work in factories

Life before the industrial revolution:

- Most people worked on farms
- Lived in small villages in the countryside
- Produced their own food
- Life was very tough
- Could only travel by horse
- No machines or factories
- Very basic living



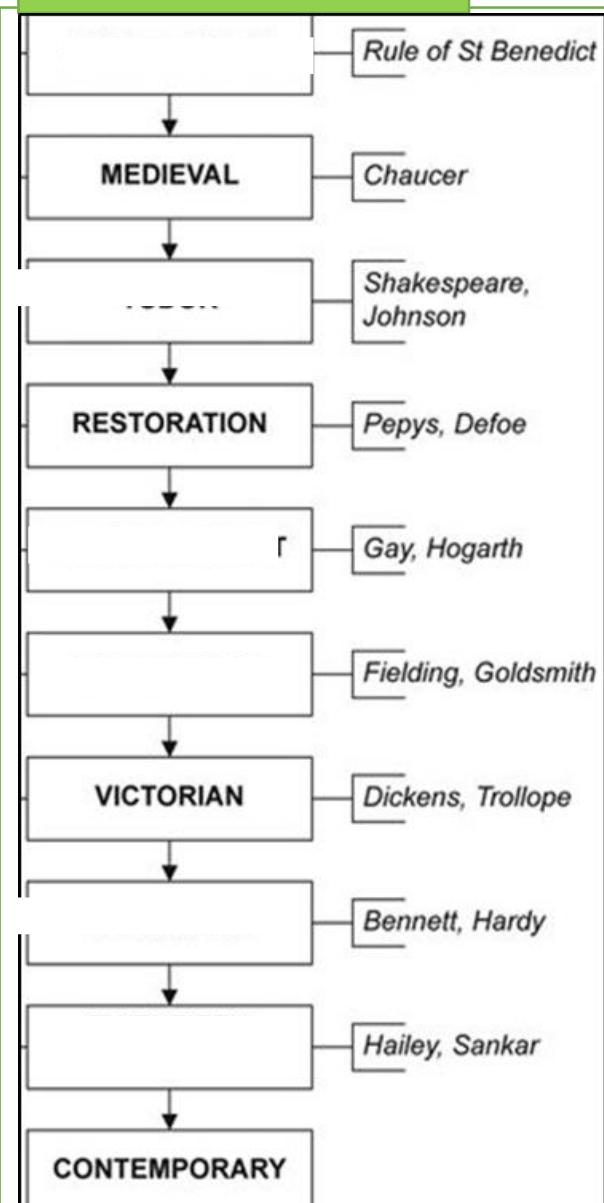
Week 6 – Dulce Decorum Est

"Dulce et Decorum Est" is a poem by the English poet Wilfred Owen. Like most of Owen's work, it was written between August 1917 and September 1918, while he was fighting in World War 1. Owen is known for his wrenching descriptions of suffering in war. In "Dulce et Decorum Est," he illustrates the brutal everyday struggle of a company of soldiers, focuses on the story of one soldier's agonizing death, and discusses the trauma that this event left behind. He uses a quotation from the Roman poet Horace to highlight the difference between the glorious image of war (spread by those not actually fighting in it) and war's horrifying reality.

The **main message** of this poem is that it is not "sweet and fitting to die for one's country" as so many people choose to believe; war is tragic and awful and gruesome and miserable, and so are the effects that it has on young people.

Bent double, like old beggars under sacks,
Knock-kneed, coughing like hags, we cursed through sludge,
Till on the haunting flares we turned our backs
And towards our distant rest began to trudge.
Men marched asleep. Many had lost their boots
But limped on, blood-shod. All went lame, all blind;
Drunk with fatigue; deaf even to the hoots
Of tired, outstripped Five-Nines that dropped behind.
Gas! GAS! Quick, boys! – An ecstasy of fumbling,
Fitting the clumsy helmets just in time;
But someone still was yelling out and stumbling,
And flound'ring like a man in fire or lime...
Dim, through the misty panes and thick green light,
As under a green sea, I saw him drowning.
In all my dreams, before my helpless sight,
He plunges at me, guttering, choking, drowning.
If in some smothering dreams you too could pace
Behind the wagon that we flung him in,
And watch the white eyes writhing in his face,
His hanging face, like a devil's sick of sin;
If you could hear, at every jolt, the blood
Come gargling from the froth-corrupted lungs,
Obscene as cancer, bitter as the cud
Of vile, incurable sores on innocent tongues, -
My friend, you would not tell with such high zest
To children ardent for some desperate glory,
The old Lie: Dulce et decorum est
Pro patria mori.

Week 1 – Poetry Through The Ages Timeline



Optional: Stretch and Challenge

Can you find any examples of Medieval poets/poems?

Can you find any examples of Romanticism Poets/poems?

Can you find any examples of contemporary poets/poems?

Week 2 – How to approach unseen poetry

What are the 10 Steps for approaching unseen poetry? Use your knowledge map to help you fill in the gaps.

Step 1: Look at the _____, form and _____.

Step 2: _____ the poem aloud.

Step 3: Think about the _____ of the speaker.

Step 4: Think about the _____ and the setting of the poem.

Step 5: Look at the _____. Think about _____. Think about the _____.

Step 6: Look at the Rhyme and _____.

Step 7: Identify poetic _____ such as similes and _____.

Step 8: Identify _____. Words that paint pictures in your mind.

Step 9: Think about the _____ of the poem. Is it positive or negative?

Step 10: Consider the _____ of the poem. How did it make you feel?

Missing Words

voice	message	mood	metaphors	title	setting
imagery	repetition	read	devices	shape	subject
	words	themes			

Week 3 – Key Terms

Key Term	Definition
Line	
Stanza	
Rhyme	
Alliteration	
Repetition	
Meter	
Verse	
Hyperbole	
Simile	
Metaphor	
Personification	
Acrostic Poem	

Week 4 – Sonnet 118

What are the rules for a sonnet:

- 1.
- 2.
- 3.
- 4.

Match the quote to the explanation

O no; it is an ever-fixed mark,
That looks on tempests, and is never shaken;

It is the star to every wandering bark,

Love alters not with his brief hours and weeks,
But bears it out even to the edge of doom.

This line shows that love can guide people who are lost.
Shakespeare compares love to a star which makes the reader think of hope and joy. This might show that love brings hope and can save people.

This line shows that love is strong and isn't broken by tough times. It also shows that love is permanent.

This line shows that true love can last for ever and doesn't change over time.

Week 5 – William Blake

Thee Facts x 3

Recall three facts about William Blake, life before the Industrial Revolution and life during the Industrial Revolution.

William Blake.

- 1.
- 2.
- 3.

Life Before Industrial Revolution

- 1.
- 2.
- 3.

Life During Industrial Revolution

- 1.
- 2.
- 3.

Why do you think William Blake was worried about the Industrial revolution?

Week 6 – SPLATT

SPLAT stands for ...	Which means ...	Ideas or key words from the poem with line numbers
Statement	What is the main message of the poem?	
Purpose	What does the poet want to achieve by writing this poem?	
Language	What kind of words did the poet include, and why? Semantic field?	
Audience	Who exactly was this poem aimed at? How do you know?	
Tone	What tone of voice do you imagine the poet reading it in? What emotions come across?	

Week 1: Percentages

Key point

Per cent means 'out of 100'. So 50% (50 per cent) means '50 out of 100', which is $\frac{50}{100}$



Key point

You can write any percentage as a fraction with denominator 100.



Key point

To convert a percentage to a decimal, you divide by 100. For example, $45\% = 45 \div 100 = 0.45$.

To convert a decimal to a percentage, you multiply by 100. For example, $0.08 = 0.08 \times 100 = 8\%$.



Worked example

Work out 26% of 60m.

$$10\% \rightarrow 60 \text{ m} \div 10 = 6 \text{ m}$$

$$20\% \rightarrow 2 \times 6 \text{ m} = 12 \text{ m}$$

$$5\% \rightarrow 6 \text{ m} \div 2 = 3 \text{ m}$$

$$1\% \rightarrow 6 \text{ m} \div 10 = 0.6 \text{ m}$$

$$26\% \rightarrow 12 \text{ m} + 3 \text{ m} + 0.6 \text{ m} = 15.6 \text{ m}$$

Worked example

Convert 70% to a fraction.

$$70\% = \frac{70}{100}$$

$$\div 10$$

$$\frac{70}{100} = \frac{7}{10}$$

$$\div 10$$

$$\frac{7}{10} = \frac{7}{10}$$

$$\div 10$$

$$\frac{7}{100} = \frac{7}{100}$$

$$\div 10$$

Week 3: FDP and Recurring Decimals

Key point

Equivalent fractions, decimals and percentages have the same value. You can convert a fraction to a decimal by dividing the numerator by the denominator.


Key point

When a positive mixed number is greater than 1, its decimal equivalent is greater than 1, and its percentage equivalent is greater than 100%. For example, $1\frac{1}{4} = 1.25 = 125\%$



Recurring means the number never ends. This is shown with a dot on top of the number.

Examples:

$$0.\dot{2} = 0.22222 \dots$$

$$0.\dot{2}\dot{4} = 0.242424 \dots$$

$$0.\dot{2}\dot{3}\dot{5} = 0.235235 \dots$$

$$0.1\dot{2} = 0.12222 \dots$$

Write $0.\dot{7}$ as a fraction.

$$0.\dot{7} = 0.7777777 \dots = n$$

Call the recurring decimal n .

$$10n = 7.7777777 \dots$$

Multiply the recurring decimal by 10.

$$10n - n = 7.7777777 \dots - 0.7777777 \dots$$

$$= 7.000000 \dots$$

Subtract the value of n from the value of $10n$ so you get all the decimal places to zero.

$$9n = 7$$

$$n = \frac{7}{9}$$

Solve the equation.

Week 4: Properties of 2D shapes

Week 4: Properties of 2D shapes

Angles in a triangle add up to 180° . An **equilateral** triangle has three equal sides and three equal angles of 60° . An **isosceles** triangle has two equal sides and two equal angles.

Key point

A This angle is called angle ABC or $\angle ABC$

Key point

A **polygon** is a closed shape with straight sides. In a **regular polygon**, the sides and angles are all equal.

regular polygons



pentagon



hexagon



heptagon

irregular polygons



hexagon

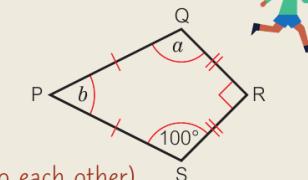


pentagon

Worked example

a Name the shape

b Work out the angles marked with letters. Give a reason for each answer.



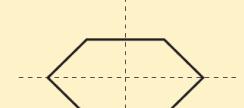
a PQRS is a kite (two pairs of equal sides next to each other)

b $a = 100^\circ$ (PR is a line of symmetry)

$b = 360^\circ - 100^\circ - 100^\circ - 90^\circ = 70^\circ$
(angle sum of a quadrilateral is 360°)

Key point

A **line of symmetry** divides a shape into two halves that fit exactly on top of each other.



2 lines of symmetry

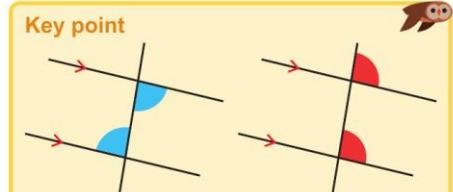


rotational symmetry order 2

The **order of rotational symmetry** of a shape is the number of times it exactly fits on top of itself when rotated a full turn.

Week 5: Angle properties

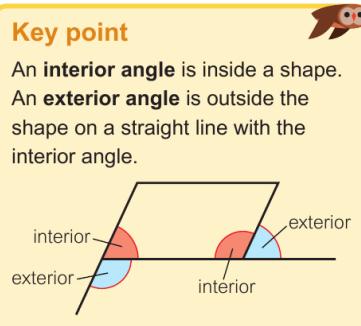
At an vertex (corner) of a polygon, the interior and exterior angles add up to 180



The blue angles are **alternate angles**. They are on different (alternate) sides of the diagonal.
The red angles are **corresponding angles**. They are on the same (corresponding) sides of the diagonal.

Key point

An **interior angle** is inside a shape.
An **exterior angle** is outside the shape on a straight line with the interior angle.



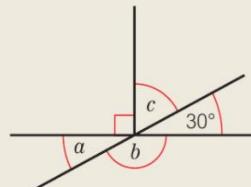
Key point

Vertically opposite angles are equal. The green angles are equal.
The blue angles are equal.



Worked example

Work out the angles marked with letters. Give a reason for each answer.



a $a = 30^\circ$ (vertically opposite angles are equal)

b $b = 180^\circ - 30^\circ = 150^\circ$ (angles on a straight line add up to 180°)

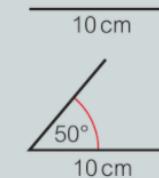
c $c = 360^\circ - 90^\circ - 30^\circ - 150^\circ = 60^\circ$
(angles at a point add up to 360°)

You need to write a reason.

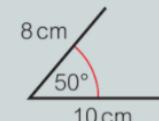
Week 6: Constructions

Construction with SAS

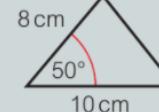
Draw one side accurately.



Draw the angle accurately.



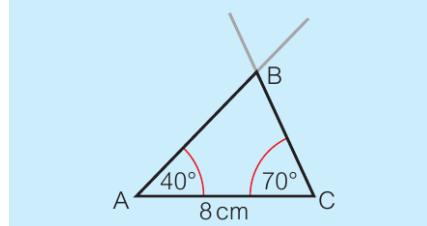
Make the other side the correct length.



Draw the third side.

Construction with ASA

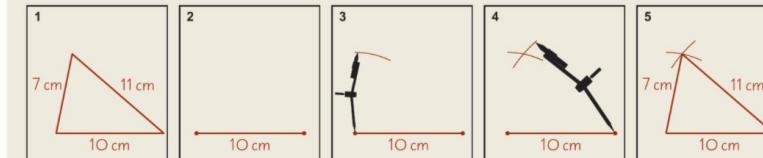
Draw lines at 40° and 70° to AC.
Point B is where the two lines cross.



Construction with SSS

Worked example

Construct a triangle with sides 10 cm, 11 cm and 7 cm.



- 1 Sketch the triangle first.
- 2 Draw a 10 cm line.
- 3 Open your compasses to 7 cm. Place the point at one end of the 10 cm line. Draw an arc.
- 4 Open your compasses to 11 cm. Draw an arc from the other end of the 10 cm line. Make sure your arcs are long enough to intersect.
- 5 Join the intersection of the arcs to each end of the 10 cm line.
Don't rub out your construction marks.

Key point

To **construct** means to draw accurately using a ruler and compasses.

Week 1: Calculations, Area and Perimeter

Key point

You can use a **zero place holder** when adding or subtracting decimals with different numbers of decimal places. For example, write $45.9 - 23.45$ as $45.90 - 23.45$.



Worked example

Work out 24×7.5



$$\begin{aligned} 24 \times 7.5 &= 12 \times 2 \times 7.5 \\ &= 12 \times 15 \\ &= 6 \times 2 \times 15 \\ &= 6 \times 30 \\ &= 180 \end{aligned}$$

Halve of 24 is 12

Keep doubling and halving until you reach a calculation you can do in your head.

Key point

The **perimeter** is the total distance around the edge of a shape. To work out the perimeter of a shape, add up the lengths of all the sides.



Key point

You can find the **area** of a shape drawn on squared paper by counting the squares inside it.

The **units** used for area are square units, such as mm^2 , cm^2 , m^2 and km^2 .

has area 1 cm^2 .

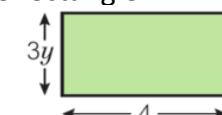
Key point

To work out the area of a rectangle or square, use $\text{area} = \text{length} \times \text{width}$. The length and the width must be in the same units.



Worked Example : Find the area of the rectangle

$$\begin{aligned} \text{Area} &= 3y \times 4 \\ &= 12y \end{aligned}$$



Week 2: Converting Fractions

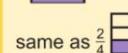
Key point

A **fraction** is part of a whole. The top number of a fraction is the **numerator**. The bottom number is the **denominator**.



Key point

Equivalent fractions are fractions that have the same value. For example,



You can find equivalent fractions by multiplying or dividing the numerator and denominator by the same number.

Key point

An **improper fraction** has a numerator that is bigger than its denominator, for example $\frac{4}{3}$. A **mixed number** has a whole number part and a fraction part, for example $1\frac{1}{3}$.



Key point

You can **simplify** fractions by **canceling** common factors. A fraction is in its **simplest form** when it cannot be cancelled any further. You cancel a fraction to its simplest form by dividing the numerator and denominator by their highest common factor (HCF).

To **compare** fractions you need to change each of them to an **equivalent fraction** with the same **denominator**.

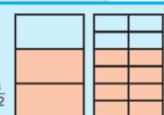
Worked example

Complete the equivalent fraction $\frac{2}{3} = \frac{8}{\square}$

$$\begin{array}{rcl} \times 4 & & \\ \frac{2}{3} & = & \frac{8}{12} \\ \times 4 & & \end{array}$$

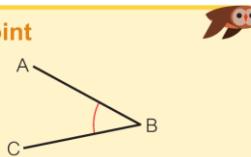
2 has been multiplied by 4 to give 8. Multiply 3 by 4 to give 12.

You can see from the diagram that $\frac{2}{3}$ and $\frac{8}{12}$ have the same value.



Week 5: Types of Angle

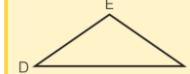
An **acute angle** is less than 90° .
 A **right angle** is exactly 90° .
 An **obtuse angle** is between 90° and 180° .
 A **reflex angle** is between 180° and 360° .

Key point


This angle is called angle ABC or \hat{ABC} or $\angle ABC$, or angle CBA or \hat{CBA} or $\angle CBA$.

Key point

You can describe a triangle using the letters at its **vertices** (the plural of **vertex**). The vertices are the corners.
 This is triangle DEF.


Key point
Key point

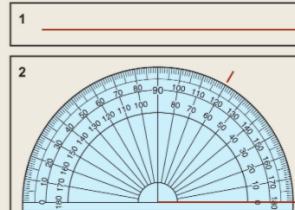
Perpendicular lines are at right angles (90°) to each other.

Parallel lines are always the same distance apart and never meet.

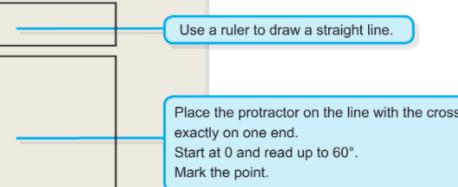
Drawing Angles accurately with a protractor

Worked example

Use a protractor to draw an angle of 60° .



Use a ruler to draw a straight line.



Place the protractor on the line with the cross exactly on one end. Start at 0 and read up to 60° . Mark the point.

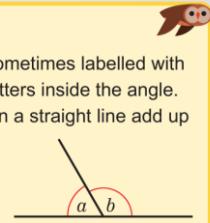


Use a ruler to join up the point to the end of the line. Label the angle 60° .

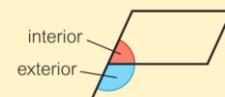
Week 6: Angle properties

Key point

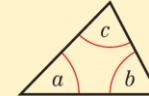
Angles are sometimes labelled with lower case letters inside the angle. The angles on a straight line add up to 180° .
 $a + b = 180^\circ$


Key point

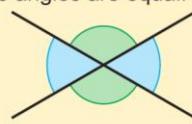
An **interior angle** is inside a shape. An **exterior angle** is outside the shape on a straight line with the interior angle.


Key point

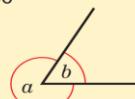
The angles in a triangle add up to 180° .
 $a + b + c = 180^\circ$


Key point

Vertically opposite angles are equal.
 The green angles are equal. The blue angles are equal.

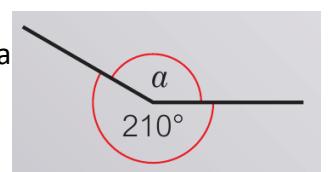

Key point

The angles around a point add up to 360° .
 $a + b = 360^\circ$


Worked Example :

Calculate the size of angle a

$$\begin{aligned} a &= 360^\circ - 210^\circ \\ a &= 150^\circ \end{aligned}$$



Week 1: Fractions and Percentages

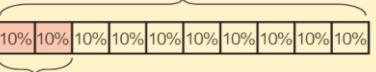
Key point

When you add or subtract fractions with the same denominator, add or subtract the numerators then write the result over the same denominator.


Key point

Per cent means 'out of 100'. So 50% (50 per cent) means '50 out of 100', which is $\frac{50}{100}$


Key point

100%

 20%
 $10\% = \frac{10}{100} = \frac{1}{10}$
 To find 10% of an amount, you divide by 10. You can then use 10% to find other percentages.


Fractions of amounts

Work out $\frac{3}{5}$ of 40.

In mathematics, 'of' means multiply.

$$\times 3 \quad \frac{1}{5} \text{ of } 40 = \frac{1}{5} \times 40 = 40 \div 5 = 8$$

$$\times 3 \quad \frac{3}{5} \text{ of } 40 = 3 \times 8 = 24$$

Worked example

Work out $\frac{1}{3} + \frac{1}{3}$

$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$

Worked example

Convert 70% to a fraction.

$$70\% = \frac{70}{100}$$

$$\div 10 \quad \frac{70}{100} = \frac{7}{10} \quad \div 10$$

Write as a fraction of 100.

Then write the fraction in its simplest form.

Key point

When you work out a fraction of a quantity, you divide the quantity by the denominator, and then multiply by the numerator.

Week 2: Parallel and Perpendicular lines

Key point

Perpendicular lines meet at right angles (90°).

Parallel lines are always the same distance apart and never meet.



Parallel lines are shown with arrows.

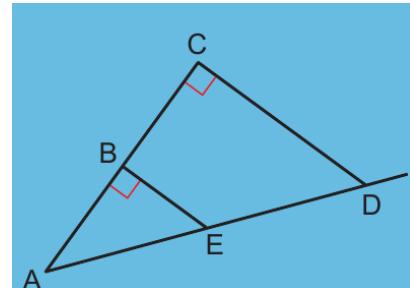


Worked Example:

Lines BE and CD are **parallel**

Lines BC and CD are **perpendicular**

A **parallelogram** has two pairs of opposite parallel sides.



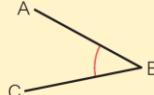
An **acute angle** is less than 90° .

A **right angle** is exactly 90° .

An **obtuse angle** is between 90° and 180° .

A **reflex angle** is between 180° and 360° .

Week 3: Types of angles

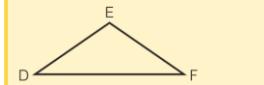
Key point

This angle is called angle ABC or \widehat{ABC} , or angle CBA or \widehat{CBA} or $\angle CBA$.

Key point

You can describe a triangle using the letters at its **vertices** (the plural of **vertex**). The vertices are the corners.

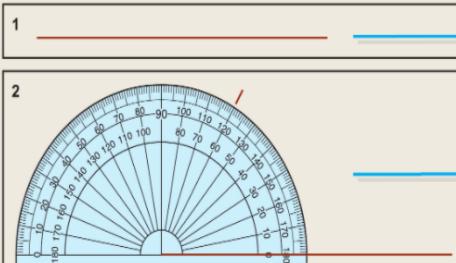
This is triangle DEF.



Drawing Angles accurately with a protractor

Worked example

Use a protractor to draw an angle of 60° .



Use a ruler to draw a straight line.



Place the protractor on the line with the cross exactly on one end. Start at 0 and read up to 60° . Mark the point.

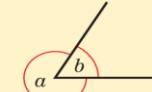
Use a ruler to join up the point to the end of the line. Label the angle 60° .

Week 4: Angle and shape properties

Key point

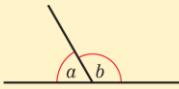
The angles around a point add up to 360° .

$$a + b = 360^\circ$$

**Key point**

Angles are sometimes labelled with lower case letters inside the angle. The angles on a straight line add up to 180° .

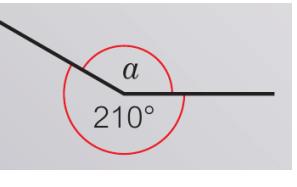
$$a + b = 180^\circ$$

**Worked Example :**

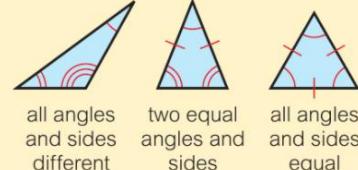
Calculate the size of angle a

$$a = 360^\circ - 210^\circ$$

$$a = 150^\circ$$

**Key point**

scalene isosceles equilateral



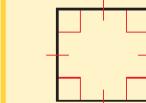
all angles and sides different
two equal angles and sides
all angles and sides equal

- The number of equal sides and angles can help you identify a **triangle**.
- Equal sides are marked using a dash.
- Equal angles are shown using the same number of arcs.

Key point

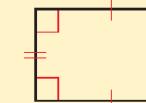
- A **quadrilateral** is a flat shape with four straight sides.
- Squares and rectangles** are special quadrilaterals. All their corners are right angles.

square



all sides equal

rectangle

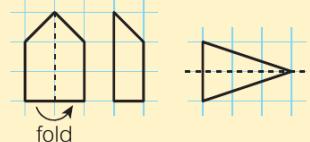


opposite sides equal

Week 5: Symmetry

Key point

- A shape has **line symmetry** if one half folds exactly on top of the other half.



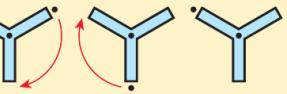
- The dashed line is called a **line of symmetry**.

Method

Imagine folding the shape along a dotted line. How many ways can you fold it in half?

Key point

- A shape has **rotational symmetry** if it looks the same more than once in a full turn.



The shape looks the same in three positions, so it has rotational symmetry of **order 3**.

Method

Trace the shape and turn it through a full turn.
How many times does the shape look the same as you turn? Only count the starting position once.

Worked Examples



2 lines of symmetry

Order of rotational symmetry 2



Parallelogram

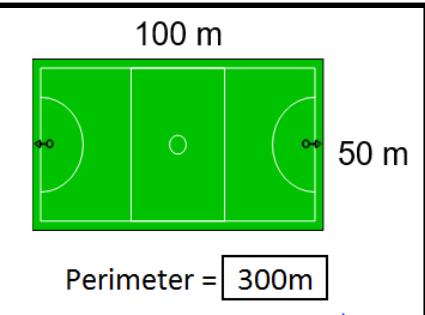
No lines of symmetry

Order of rotational symmetry 1

Week 6: Area and Perimeter

Key point

The **perimeter** is the total distance around the edge of a shape. To work out the perimeter of a shape, add up the lengths of all the sides.

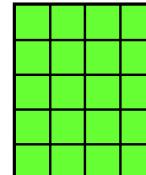
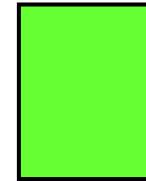


Perimeter = 300m

Worked Example

Area is the space inside a 2D shape

Area is measured by the number of squares that can fit inside a shape.



The units for area are cm^2 , m^2 , km^2 etc.

Key point

To work out the area of a rectangle or square, use
 $\text{area} = \text{length} \times \text{width}$
The length and the width must be in the same units.

Key point

You can find the **area** of a shape drawn on squared paper by counting the squares inside it.

The **units** used for area are square units, such as mm^2 , cm^2 , m^2 and km^2 .

1 cm
 1 cm has area 1 cm^2 .

Term 2**5.2 Matter, separating mixtures****5.2.1 Pure substances and mixtures****5.2.2 Solutions****5.2.3 Solubility****Matter: 5.2.1 Pure substances and mixtures**

A **pure substance** contains one substance only, all the particles are the same.

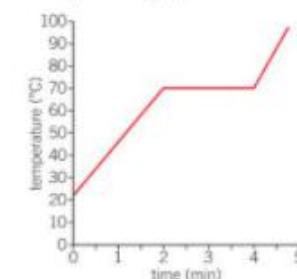
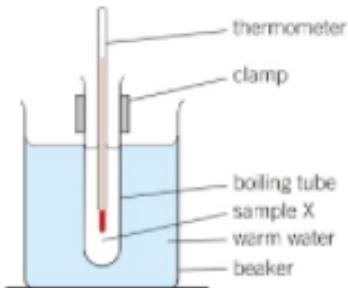
A **mixture** contains two or more substances which may be elements or compounds.

How can you identify a pure substance?

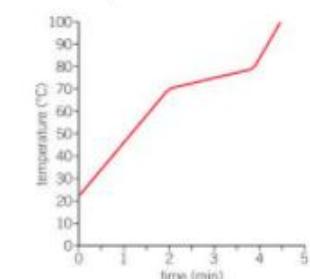
A pure substance has a **fixed melting point** and a fixed boiling point. You could heat up a liquid to see if it would boil at different temperatures.



▲ A mixture of two elements, iron and sulfur.



▲ Sample X graph.



▲ Sample Y graph.

Sample X has a fixed melting point. Its temperature stays at 70 °C until all the solid has melted. This shows that Sample X is pure.

Sample Y melts between 70 °C and 80 °C. It does not have a fixed melting point. It is impure.

Matter: 5.2.2 Solutions

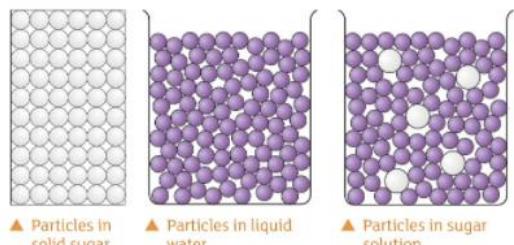
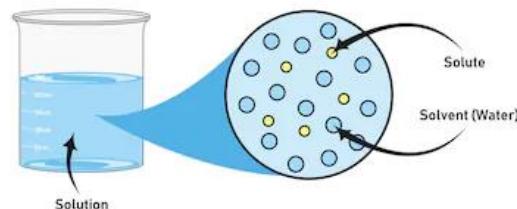
Catherine adds sugar to water, and stirs.

The sugar **dissolves** in the water.

Water is the **solvent**. Sugar is the **solute**.

This makes a **solution**.

When a substance dissolves into a solvent the solute surrounds itself with the solvent.



▲ Particles in solid sugar.

▲ Particles in liquid water.

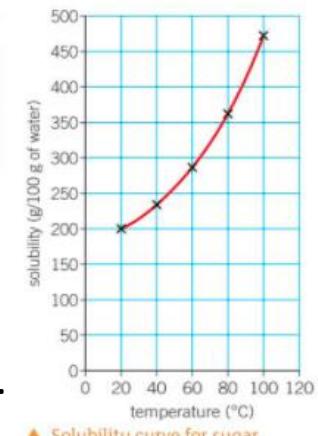
▲ Particles in sugar solution.

Matter: 5.2.3 Solubility

If a substance can dissolve it is described as **soluble**, something that is **insoluble** will not dissolve.

When dissolving a something like sugar in a particular amount that would dissolve, when sugar can no longer be dissolved we describe it as a **saturated solution**.

Temperature (°C)	Solubility of sugar (g/100 g of water)
20	202
40	236
60	289
80	365
100	476



▲ Solubility curve for sugar.

At higher temperatures a greater mass of solute can dissolve. This can be shown on a **solubility curve graph**.

Week 1

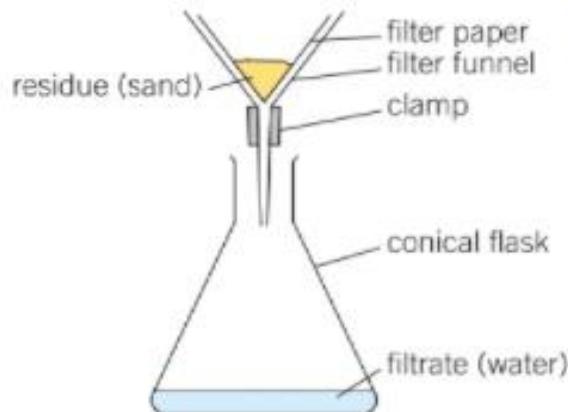
5.2 Matter, separating mixtures

5.2.2 Solutions
5.2.3 Solubility
5.2.4 Filtration

Matter: 5.2.4 Filtration

Filtration is a separation technique that is used to separate an insoluble solid from a liquid.

For example, sand and water. If you pass sand and water through filter paper, the sand stays in the paper and the liquid passes through, the liquid that passes through the paper is called the **filtrate** and the sand is the **residue**.



Apparatus for a filtration experiment.

Matter: 5.2.2 Solutions

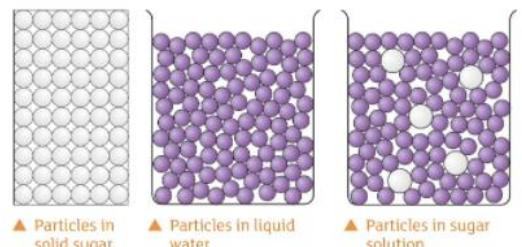
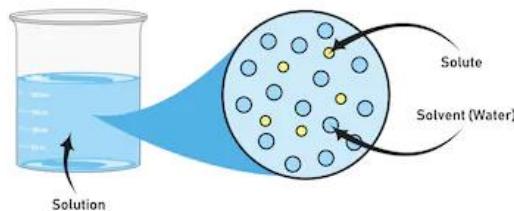
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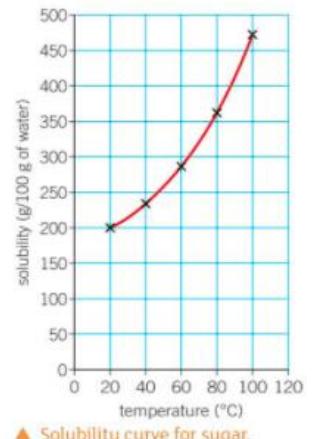


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At higher temperatures a greater mass of solute can dissolve. This can be shown on a **solubility curve graph**.

Week 2

5.2 Matter, separating mixtures

5.2.5 Evaporation and distillation

5.2.6 Chromatography

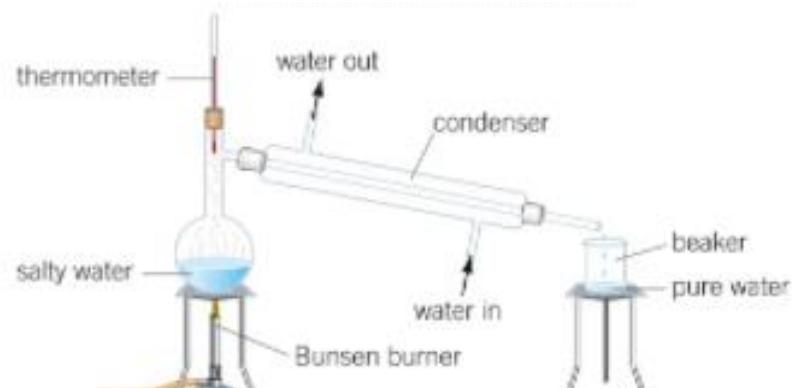
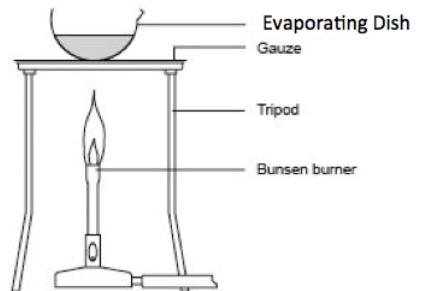
Matter: 5.2.5 Evaporation and distillation

Evaporation is used to make glue or to make crystals that can be used for medicines or to form salt crystals.

Distillation is a separation technique that can separate a soluble solid from a liquid, for example salt and water.

Salt and water have different boiling points so when we heat up salt water the water evaporated and salt is left behind.

Evaporation experiment equipment:



▲ Removing the salt from salty water.

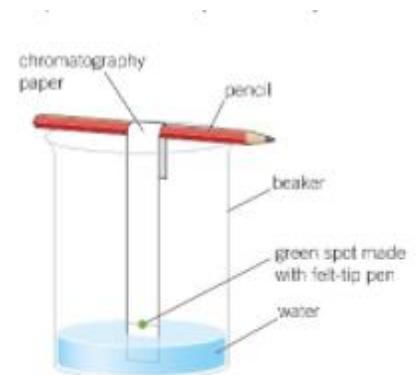
Matter: 5.2.6 Chromatography

Chromatography is another separation technique that can be used to separate the dyes.

Dyes are used for things like colouring sweets or pen inks.

It works by water being absorbed and moving up paper.

A dye that is strongly attracted to the water than to the paper it travels further than a dye that is attracted more strongly to the paper than to the water so the dyes separate, to make a chromatogram.



▲ Chromatography apparatus.



▲ Chromatogram of ink from a green felt-tip pen.

Chromatography can be used to show the pigments in spinach, or nutrients in foods.

Week 3

2.1 Electromagnets, potential difference

2.1.1 Potential Difference

2.1.1 Current

2.1.2 Resistance

Electromagnets: 2.1.1 Potential Difference

Potential difference (p.d.) is a push in a **cell** or **battery** that makes a charge move. It can tell us about:

- The size of force on the charges
- The energy transferred by the cell to the charges
- The energy transferred by the charges to the components in the circuit



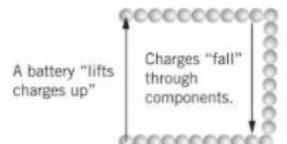
▲ Batteries come in different shapes and sizes.



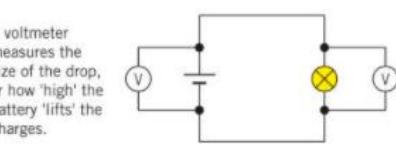
▲ In a potato cell, a chemical reaction between the metals and the potato produces a potential difference.

To measure p.d. you use a **voltmeter**, and it is measured in **volts**.

Sometimes people talk about the **voltage** of cell or battery, it is better to talk about **potential difference**. You can think of it like height difference.



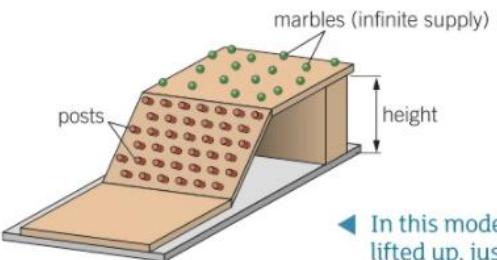
▲ You can think of the battery 'lifting' up the charges. In the circuit above, the voltmeters would read the same.



Electromagnets: 2.1.2 Resistance

Resistance tell you how easy or difficult it is for charge to pass through a component, it is measured in **ohms (Ω)**.

We can calculate it using;



▲ In this model the marbles are lifted up, just like a battery provides a potential difference.

$$\text{Current } (A) = \frac{\text{potential difference } (V)}{\text{resistance } (\Omega)}$$

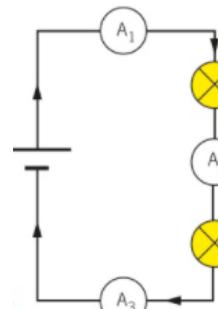
Good **electrical conductors** have a low resistance.

Good **electrical insulators** have a high resistance.

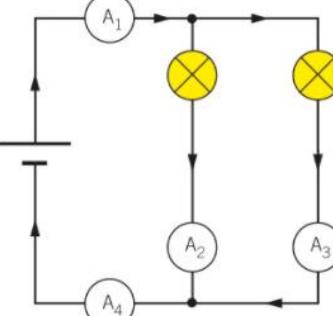
Electromagnets: 2.2.1 Current

Current is the amount of charge flowing per second. **Charge** means charged particles, in the case of electricity they are negative charges called **electrons**. Current is measured in amperes (A) or amps, with an **ammeter**.

In a series circuit the current is the same everywhere in the circuit.



In a parallel circuit the current would be split between the loops.



Week 4

2.1 Electromagnets, potential difference

2.1.3 Series and Parallel Circuits

2.2.2 Charging up

Electromagnets: 2.2.2 Charging Up

There are two types of **electric charge**, positive (+) and negative (-) charge. Charged particles can **attract** or **repel**, this is called an **electrostatic force**.



▲ Repelling.

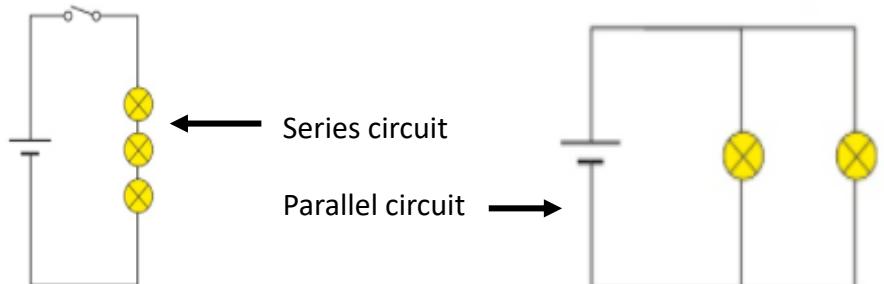


▲ Attracting.

Electromagnets: 2.1.3 Series and parallel circuits

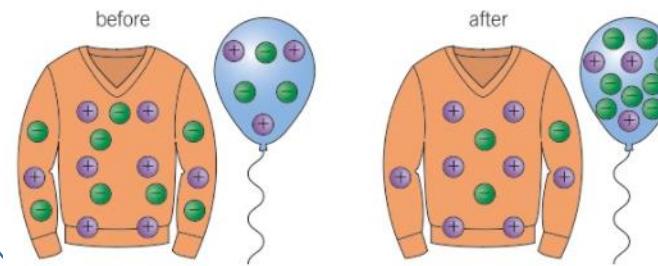
Christmas lights were connected in **series**, they are in one loop with the switch and battery.

Parallel circuits are when there is more than one loop.



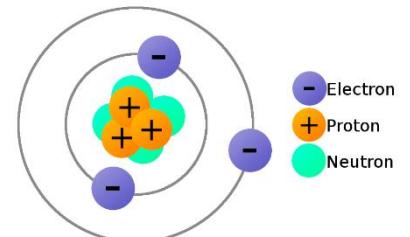
Potential difference in a series circuit will be split across each component in the circuit. Potential difference in a parallel circuit will be the same across each component in the circuit.

When you rub a balloon on your jumper, some electrons are transferred from the jumper to the balloon. The balloon is **charged up**. It now has more electrons than protons, so it is **negatively charged**. Your jumper is **positively charged**.



Atoms are made of three types of even smaller particles:

- Protons = positive charge
- Electrons = negative charge
- Neutrons = no charge



- Electron
+ Proton
0 Neutron

Week 5

9.1 Ecosystems, interdependence

9.1.1 Food chains and webs

9.1.2 Disruption to food chains and webs

9.1.3 Ecosystems

9.1.4 Competitions

Ecosystems: 9.1.4 Competitions

To survive animals compete with each other to get resources, this is called **competition**.

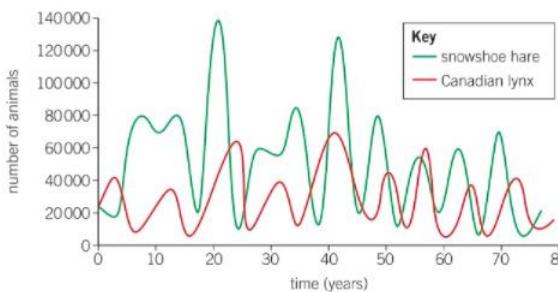
Animals compete for; food, water, space and mates.

To survive plants also compete with each other to get; light, water, space and minerals.

Predator-Prey relationships

When the number of prey in an environment increase, the predators have more to eat.

This increases the number of predators.



The growing predators population eats more prey and the number of prey fall.

Eventually there isn't enough food for all the predators so their numbers decrease.

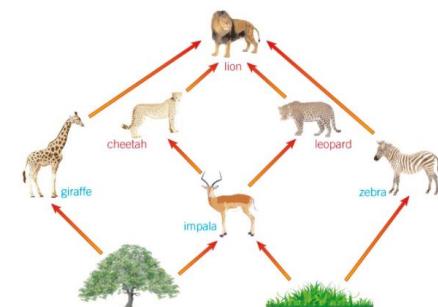
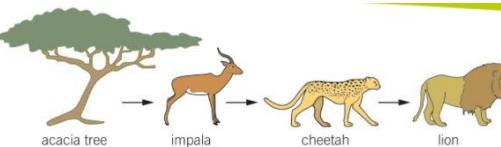
There are now fewer predators so the number of prey increase. This repeats and repeats.

Ecosystems: 9.1.1 Food chains and webs

A **food chain** is a diagram that shows what an organism eats, it shows **energy** transfer.

- The first organism is a **producer**
- The second organism is a **herbivore**
- The third organism is a **carnivore**

Consumers eat plants or animals, **prey** is an organism that is eaten by another organism and a **predator** eats other animals.



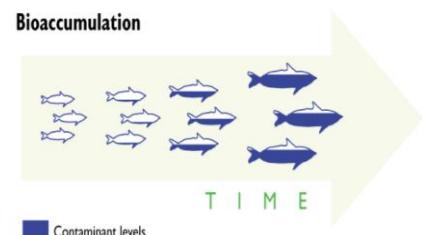
A **food web** is a diagram that shows a set of linked food chains.

Ecosystems: 9.1.2 Disruption to food chains and webs

Interdependence is the way in which living organisms depend on each other to survive, grow and reproduce. Organisms in a food web for example are interdependent, they all need each other.

The number of animals or plants of the same species that live in the same area is called a **population**.

If an insecticide gets into rivers fish can get them in their systems, if the fish are eaten this can end up in the consumers system. The more that are eaten the more the insecticide builds up in the consumer. This is called **bioaccumulation**.



Ecosystems: 9.1.3 Ecosystems

An **ecosystem** is the name given to the plants and animals that are found in a particular location, and the are in which they live. These plants and animals depend on each other. The organisms in an ecosystem are known as a **community**. The are that live in is called a **habitat**. The conditions found in a habitat are known as the **environment**.

For example, in a pond ecosystem:

- Habitat – pond
- Community – water plants, microorganisms, insects, fish and fish-eating birds



Week 6

9.2 Ecosystems, plant reproduction

9.2.1 Flowers and Pollination

9.2.2 Fertilisation and Germination

9.3.2 Seed dispersal

Ecosystems: 9.2.3 Seed dispersal

Seeds can be **dispersed**, which means they are spread, out in several ways. They can be dispersed by the wind, animals, water or explosion.



Wind dispersal can happen when seeds move in the wind. The seeds are light and feathery to allow them to move easily in the wind.

Animal dispersal can happen in two ways; internally, when the seeds are eaten and leave the animal through droppings or externally, when the seeds have hooks and attach to the fur and carried away.



Water dispersal can happen when seeds move using streams and rivers.

Explosive dispersal - Some fruits can burst open when they are ripe and can throw the seed in all directions.



Ecosystems: 9.2.1 Flowers and Pollination

From the outside of the flower you can see the **petals** which are normally brightly coloured to attract insects and **sepals** which are leaves that protect unopened buds. Inside the flower there are both male and female parts.

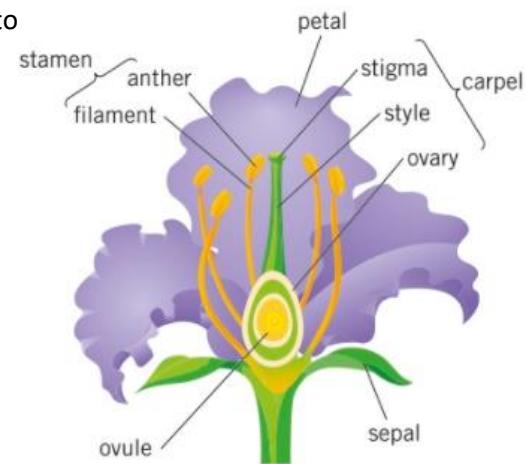
The **stamen** is the male reproductive part – it contains:

- **Anther** - produces **pollen**, the male sex cell
- **Filament** – holds up the anther

The **carpel** is the female reproductive part – it contains:

- **Stigma** – this is sticky to 'catch' grains of pollen
- **Style** – holds up the stigma
- **Ovary** – contains **ovule**, the female sex cells.

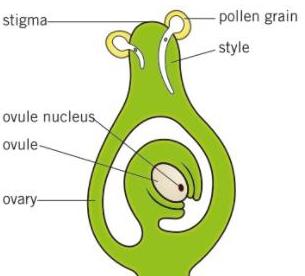
Pollination is when pollen and ovules join to produce a seed. Pollination can happen by the wind, insects or animals.



▲ Parts of a flower.

Ecosystems: 9.2.2 Fertilisation and germination

Fertilisation is process where the pollen and ovule meet to form a seed. The ovary develops into the fruit and the **ovules** becomes **seeds**.



The tube grows out of the pollen grain and down through the style.



The pollen nucleus moves down the tube.



The pollen nucleus joins with the ovule nucleus. Fertilisation takes place and a seed will form.

When a seed starts to grow, it is called **germination**. To germinate a seed needs three things; water, oxygen and warmth.

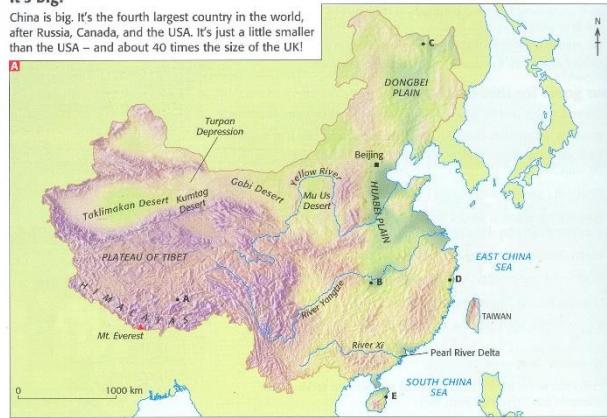
Week 1 – Physical Geography of China

China is a country located in East Asia bordering fourteen other countries.

South China and East China border the Pacific Ocean, with the South China Sea to the south and the East China Sea and Yellow Sea to the east.

It's big!

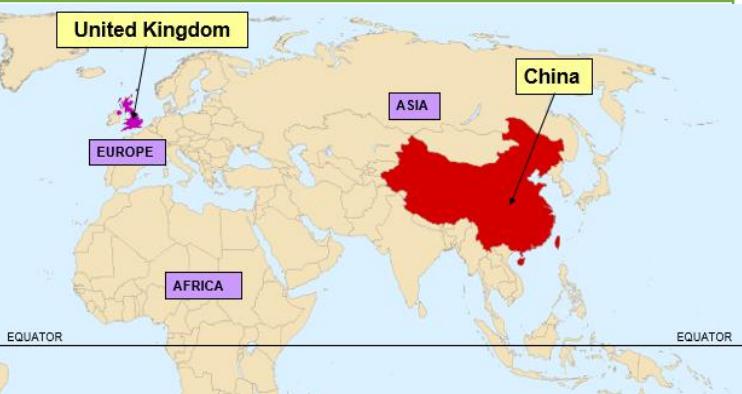
China is big. It's the fourth largest country in the world, after Russia, Canada, and the USA. It's just a little smaller than the USA – and about 40 times the size of the UK!



Rivers

China has thousands of rivers. The map shows just three. Note that:

- ◆ the Yellow River is the world's sixth longest river. It is named after the yellow silt it carries. This is deposited in the lower course of the river, raising the bed – and causing heavy flooding.
- ◆ the River Yangtze is the world's third longest river. It is really busy – like a motorway for ships and boats. It too has a history of flooding. Read about its big new dam in Unit 2.9.
- ◆ The River Xi is also very busy. It flows to the Pearl River Delta, which is one of China's top industrial areas.



Relief

As you go west in China, the land steps upwards. Look at the map.

- ◆ The lowest areas are along the coast. The Huabei Plain (or North China Plain) is the largest area of flat land. It is very fertile.
- ◆ The next step up has mountain ranges, and large deserts. Almost 20% of China is desert. Some of the deserts are sandy, and some stony.
- ◆ The top step has the vast Plateau of Tibet. It is really high here – about 4000 m above sea level, on average. The Himalayas form its southern border. And note Mt Everest. It lies on the border with Nepal.



Key Terms	Definition
Desert	An area that receive less than 5cm of rainfall per year.
Mountain	A land form that has a altitude of more than 2000 ft.
Relief	The shape of the land- is it hilly or flat?

Week 2 – Made in China?



Globalisation

The world is now a very small, interconnected place, as a result of **globalisation**. This term is used in **human geography** and refers to **physical** and **human** processes that extend across the world.

Global trade

Global trade is the result of uneven **distribution** of materials and resources across the world. No single country has everything it needs and so countries need to trade with each other. Countries that rely on each other to trade goods and services are **interdependent**.

Industry in China

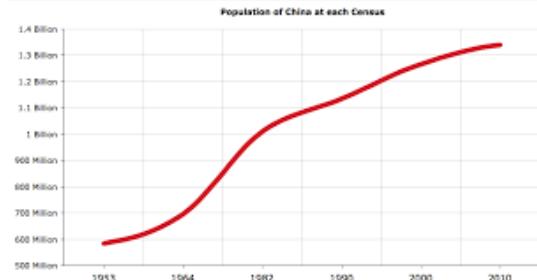
China's growth is partly due to its move from **agricultural** production to **manufacturing**. Many **manufactured goods** that we buy in the UK come from China.

Reasons that China's manufacturing industry has grown

- China has created excellent opportunities for businesses to set up - making sure that the **infrastructure** is present.
- **Incentives** are offered by some agencies in China. There are **Special Economic Zones** (SEZ) that offer tax incentives to foreign businesses. China has a good supply of highly-skilled **labour**.
- There are lower **labour** costs involved - there is no **national minimum wage**.
- China has a reputation of a strong **work ethic**, and workers are used to long working hours.
- Health and safety laws are sometimes not heavily enforced which means companies do not have to spend money on meeting **health and safety standards**.

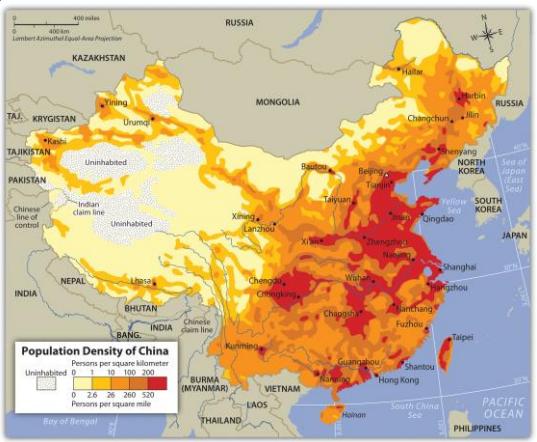
Week 3- Where do people live?

Populations can grow or decline, and China is an example of a place that passed through a period of huge **exponential population growth**. China has the world's largest population and a history of very strict controls on that population.



A graph to show population growth in China. After a long period of growth, its population is beginning to **stabilise**.

China's vastly different climates and environments have produced an **unevenly distributed population**. **Population density** varies strikingly, with the greatest **contrast** occurring between the eastern half of China and the lands of the west and the northwest.



China has seen rapid **urbanisation** as an increasing proportion of people move to cities. Over the last 20 years, the percentage of people who live in cities has increased from 20 per cent to nearly 50 per cent. The reasons for **rural to urban migration** are:

- people are moving into cities to find work
- farming systems in rural areas changed to allow people to leave
- newly **industrialised** areas needed workers
- there was the belief that **the standard of living** is better in cities

Week 4- How rich is China?

A wealthy past

- For centuries China was the world's most developed and wealthy country. Even 200 years ago it had the world's largest economy.
- Much of this was due to its technology. For example it was ahead in building canals to move crops and goods around. It had a **civil service** to help run the country and its officials were chosen by exam, only the best got through.
- Trade with other countries was another big factor. Europe was mad for Chinese silk, tea and **porcelain**. China demanded payment in silver.



China



Area:	9,560,900
Total Population:	1313 m
Population Density:	137.4
Life Expectancy:	74.6
Adult Literacy:	90.9%
GDP:	\$1470
Unemployment:	4.2%
Energy Consumption:	1094
Foreign Debt:	15%
Foreign Aid Given:	-
Doctors per 1000 pop:	1.0
Money spent on education:	-
Computers per 1000 pop:	4.1

China today

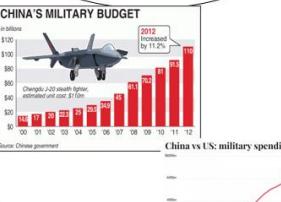
- China is one of the '**Newly Emerging Economies**' (NEE's).
- It is developing, but is behind the most developed countries like the US or UK.
- China has a very **uneven distribution** of wealth and access to basic needs. For example, **Guizhou Province**, still has extreme poverty within the country and a large **rural** population.
- China has made considerable progress in raising the average **life expectancy** across the country from 69.3 years in 1990 to 76.3 years in 2016. China still falls 4.5 years short of the average of 80.8 years found in more developed countries.

Week 5- Is China a global superpower?

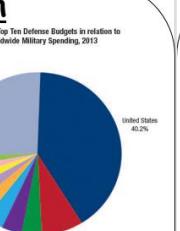
Military Strength

The world spends a total of \$1600 billion on armies, weapons, warships and fighter planes. China alone spends around \$115 billion.

CHINA'S MILITARY BUDGET



Estimated Top Ten Defense Budgets in relation to Worldwide Military Spending, 2013



Country	Budget Share (%)
United States	40.2%
China	7.9%
India	3.7%
Russia	3.6%
Japan	3.7%
United Kingdom	3.6%
Saudi Arabia	3.2%
Germany	2.8%
France	2.5%
Brazil	2.2%
All Other	25.6%

Economy

China has the second largest economy in the world. The USA is the biggest.

The gap between the rich and the poor is growing.

Around 10% of the Chinese population live in poverty (below \$1.25 a day).

As a country China earns \$11.27 trillion a year. (A trillion is a million million)

Political Influence

China has a big economy, a big population, big military spending and a huge slice of global industry. This makes it strong politically!

Does having power over other politicians make the China a "superpower"?

Decisions made by the Chinese Government can have big impacts on other countries.

The Government are strict on what Chinese people do. e.g. The One Child Policy

Population

China has the largest population in the world!

China=1.4 billion
India=1.2 billion
USA=313m

Most of China's population live in the east with large uninhabited areas in the west.

Is this a sign of a Superpower? What does this mean for food supplies? Education and health resources?

Does a bigger population mean more man power and brain power to drive the economy?

Industry

Out of the world's five busiest ports in the world, three are in China.

China has been the largest exporter of goods since 2009. In 2017 Exports amounted to over \$2 trillion.

China has 25% of the world's clothing market.

China has the world's largest economy but also the 4th largest land mass and biggest population.

50% of cameras, 30% of air conditioners and televisions, 25% of washing machines, and 20% of refrigerators in the world are now being produced or assembled in China.



Week 6- Is China choking?

Develop first, clean up later

In Britain, development took off with the Industrial Revolution. We set up lots of factories. Towns and cities grew rapidly. We poured harmful gases into the air, and toxic waste into rivers. We ruined places.

And then, when we got richer, we began to clean up. Most other rich countries have followed the same pattern.

So how is China doing?

China is developing faster than any country in history. It is making the same mistakes as Britain did. And now pollution is a massive problem.

Coal: the main culprit

China has lots of coal. It depends on coal for 70% of its energy needs. Coal is burned in most of its power stations, and in factory furnaces. So China's development is fuelled by coal, just as Britain's was. And the trouble is: coal is a very dirty fuel.

First, it gives off carbon dioxide when it burns. This is linked to **global warming**. Acidic gases (sulphur dioxide and nitrogen oxides) form too. They cause **acid rain**. Then particles of soot and ash get everywhere, including onto your washing, and into your lungs.

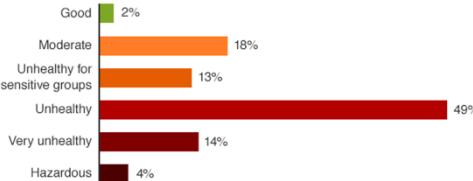
The clean-up begins

China is now very worried about pollution. It is also under pressure from other countries, because it is the world's top producer of carbon dioxide. So it is trying to clean up.

- ◆ It plans to build hundreds more coal-fired power stations. But scientists are looking for ways to trap the carbon dioxide from them.
- ◆ It plans to build more nuclear power stations, and wind farms, and dams for hydroelectricity, since these don't give carbon dioxide.
- ◆ It has started to build thousands more sewage plants. (It needs at least 150 000 more.)
- ◆ It is being tougher on factories that cause pollution.



Beijing air quality 2008-2015
Daily average air quality index (AQI*) at US embassy, based on PM2.5 concentration readings



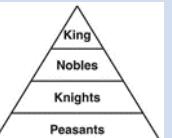
China is constantly struggling with poor quality air. Unhealthy air quality was recorded in Beijing 49% of the time, with hazardous air recorded 4% of the time.

Other causes of pollution

- ◆ There are laws to stop factories polluting the air and rivers. But often they are not enforced – because producing lots of goods is the priority.
- ◆ More and more people have cars. So carbon dioxide and other gases from car exhausts add to the problem.
- ◆ There are not nearly enough sewage works. So millions of tonnes of untreated waste from homes, and factories and other businesses, pour into streams, lakes, and rivers every day.

Week 1-5

Key concept 1: How did William take control after the Battle of Hastings?

Harrying the North	Feudal System	Domesday Book
Edgar the Atherling raised a rebellion against William. William beat him and in return burned all the villages and crops – people began to die of starvation 	William couldn't keep control by himself so he kept control by lending land to people he trusted. In return they gave loyalty and taxes to William. 	William wanted to know more about the country he had taken over so he ordered a census. With the information he could decide how much money he could gather in taxes 

Key concept 1: How did William take control after the Battle of Hastings?

William used many **methods** to control England. The English did not like their new foreign leader, so William had to be strict.

The **Harrying of the North** was bloody and changed the face of the North forever.

The **feudal system** ensured that people knew their place in the new Norman society. It also helped William to reward his loyal knights with new status and land.

The **Domesday Book** (doom in a religious sense – Judgement Day) ensured that William knew exactly what everyone owned so he could tax England and fund his court and army.

The Norman rule changed England forever, not only in terms of land ownership, but also language, customs and laws.

Week 6-11

Key concept 2: Medieval Castles

A further **method of control** was the building of many castles in England.

Attack Methods

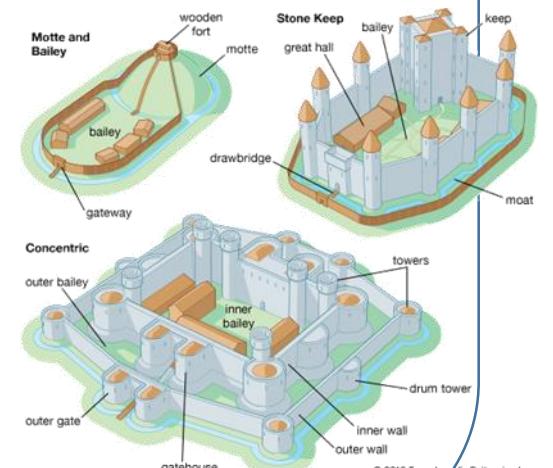
- Siege: surround the castle and starve the defenders out
- Battering Ram: to knock down the large gates
- Trebuchet: to knock down stone walls
- Mining: to topple towers and set underground fires
- Belfry (Siege tower and ladders): to scale the walls and get soldiers inside the castle

Types of Castles

1. Motte and Bailey: Quick to build. Motte = a wooden fort on top of a hill, Bailey = protected area for soldiers and supplies
2. Stone Keep: Introduces stone against fire attacks, strong keep for lasting out a siege, towers for high view points.
3. Concentric: at least 2 layers of stone curtain walls with drum towers for maximum protection against trebuchets.

Defensive Features

- Moat: to stop attackers reaching the walls
- High stone walls: to stop fire attacks
- Murder holes: to drop hot tar onto attackers
- Drawbridge and Portcullis: to cut off entry to the castle

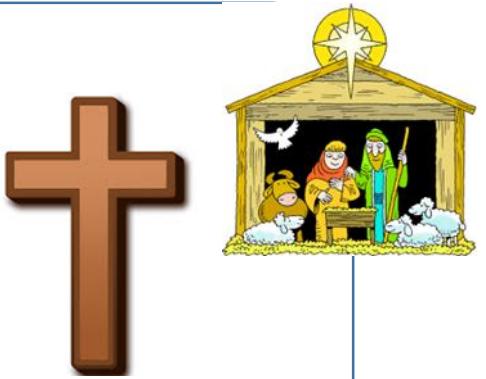


Week 1-5

Key concept 1: Who was Jesus?

Jesus came to teach people God's will for them, and to show them what life would be like in the Kingdom of God.

Jesus of Nazareth, the **Messiah (Christ)** for Christians, is important. He was born in a stable and his birth is celebrated at **Christmas**. He not only taught people about God, he showed them what God is like. However he was unpopular and disliked by those in power and he was sentenced to death. Jesus was put to death on the cross. This was called **crucifixion**, this is remembered through the Christian celebration of **Easter**.



Key concept 2: Key Teachings – Miracles and Parables

The **New Testament** of the Bible records more than 30 **miracles** that **Jesus** performed during his ministry.

This included healing people of blindness, deafness, muteness and a variety of physical disabilities and afflictions, as well as other kinds of **miracles**, such as walking on water, calming a storm and raising people from the dead.



While **Jesus** was with his disciples and went around teaching to all the crowds who came to hear him. He often spoke and told **parables**.

A **parable** isn't a true story, it's a story that **Jesus** made up to teach a lesson.

Jesus told many Parables the most famous being the **Good Samaritan** and the **Lost Sheep**.

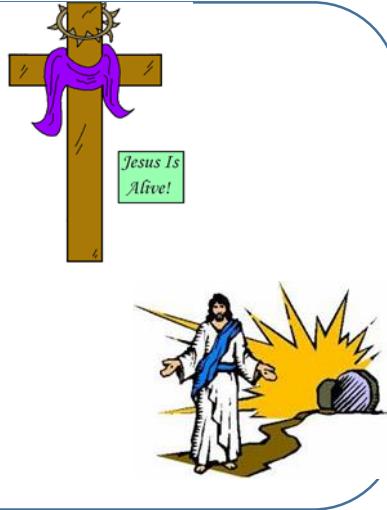
Week 6-12

Key concept 3: The resurrection of Jesus

The **Holy Week** marks important events just before the end of Jesus' life. He returned to Jerusalem and held the **Last Supper** with his disciples. One of them, **Judas**, betrayed him to the Romans. Jesus was killed on a cross.

The **resurrection of Jesus or resurrection of Christ** is the Christian religious belief that, after being put to **death**, Jesus rose again from the dead.

However some people believe that this could not be possible. It is thought that there are different theories on how Jesus was able to bring himself back from the dead. Theories include hallucination, the body was stolen and the Swoon Theory.



Websites and further reading:

<http://www.bbc.co.uk/schools/gcsebitesize/rs/god/christianityrev3.shtml>

<http://www.primaryhomeworkhelp.co.uk/religion/christian.htm>

<https://wiki.kidzsearch.com/wiki/Jesus>

<http://www.about-jesus.org/miracles.htm>

<http://www.about-jesus.org/life-of-jesus.htm>



Term 3 Week 1 & 2 -

- Say what you study on each day of the week
- Sequence your statements with time phrases

¿Qué estudias? What do you study?

Estudio...	I study...	informática	ICT
ciencias	science	inglés	English
dibujo	art	matemáticas	maths
educación física	PE	música	music
español	Spanish	religión	RE
francés	French	teatro	drama
geografía	geography	tecnología	technology
historia	history		

¿Cuál es tu día favorito? What is your favourite day?

Mi día favorito es el lunes/ el martes.	My favourite day is Monday/Tuesday.	Porque... por la mañana	Because... in the morning
Los lunes/martes estudio...	On Mondays/Tuesdays I study...	por la tarde	in the afternoon
¿Por qué?	Why?	estudiamos	we study
		no estudio	I don't study

Expresiones de tiempo Time expressions

normalmente	normally	primero	first
aveces	sometimes	luego	then

- Say what you like to study-joining opinions and verbs
- Give reasons for your opinions –positive and negative
- Talk about your teachers.
- Compare subjects and use phrases to give more detailed opinions

Opiniones Opinions

¿Te gusta el dibujo?	Do you like art?	aburrido/a	boring
Sí, me gusta (mucho) el dibujo.	Yes, I like art (a lot).	difícil	difficult
No, no me gusta (nada) el dibujo.	No, I don't like art (at all).	divertido/a	funny
¿Te gustan las ciencias?	Do you like science?	fácil	easy
Sí, me encantan las ciencias.	Yes, I love science.	importante	important
		interesante	interesting
		práctico/a	practical
		útil	useful

Gramática

When you give opinions about subjects, make sure you use **el/la/los/las** before the noun.
You don't use 'the' in English, but you **must** use **el/la/los/las** in Spanish.

singular
Me gusta **el** español. I like Spanish.

plural
Me gustan **las** matemáticas. I like maths.



Gramática
The verb ending for the 'we' form of -ar verbs is -amos.
estudiamos we study
escuchamos we listen



This is CORE vocabulary for this topic.

Using the comparative:
Más/menos + adjective+ que
More/less+ adjective+ than
e.g: El español es más práctico que el italiano

Los profesores Teachers

El profesor/La profesora	The teacher is...
es...	
paciente	patient
raro/a	odd
severo/a	strict



Term 3 Week 3 & 4 -

- Saying what there is and is not in your school
- Describing facilities -using and agreeing adjectives
- Saying what you think of your school-joining nouns and opinions
- Knowing school facilities vocab

This is CORE vocabulary for this topic.

¿Qué hay en tu insti? What is there in your school?

En mi insti hay...	In my school, there is...	una clase de informática	an ICT room
un campo de fútbol	a football field	una piscina	a swimming pool
un comedor	a dining hall	unos laboratorios	some laboratories
un gimnasio	a gymnasium	unas clases	some classrooms
un patio	a playground	No hay piscina.	There isn't a swimming pool.
una biblioteca	a library		


¿Cómo es tu insti? What's your school like?

Es...	It's...	grande	big
antiguo/a	old	horrible	horrible
bonito/a	nice	moderno/a	modern
bueno/a	good	pequeño/a	small
feo/a	ugly		

- Knowing a selection of activity verbs
- Saying what you eat and drink at break time
- Joining ideas together with a range of connectives and sequencers

¿Qué haces durante el recreo? What do you do during break?

Como...	I eat...	Bebo...	I drink...
un bocadillo	a sandwich	agua	water
unos caramelos	some sweets	un refresco	a fizzy drink
chicle	chewing gum	un zumo	juice
una chocolatina	a chocolate bar	Leo mis SMS.	I read my text messages.
fruta	fruit	Escribo SMS.	I write text messages.
unas patatas fritas	some crisps	Nunca hago los deberes.	I never do homework.



Make sure you practise to be able to use and recognise the vocab. Practise using 'look, cover, write, check'. Add other things you may wish to say to your list.

Term 3: Week 5 & 6 -

- Practising your listening and writing skills
- Understanding detail about school
- Predicting what you will hear

SKILLS

Predicting what you will hear

Before you listen, always try to predict what you are going to hear. If you have an idea of the words someone is going to use, you will find it much easier to understand them. Also try looking at pictures and titles to help you predict what you are going to hear.



BE AN ACTIVE LISTENER



Using the questions

Sometimes you can predict what you are going to hear by looking closely at the questions.

Algunas preguntas Some questions

¿Qué...?	What/Which...?
¿Cuándo...?	When...?
¿Dónde...?	Where...?
¿Cómo...?	How/What...?
¿Cuántos...?	How many...?



- Writing longer texts about school
- Checking the **accuracy** of your written work

SKILLS

Writing better sentences



Make your sentences matter by using:

- connectives (*y, pero, o, también, porque*)
- intensifiers (*muy, bastante, un poco*)
- sequencers (*primero, luego*)
- expressions of frequency (*a veces, normalmente*).

Look at how Guillermo uses these in exercise 6.

Checking your spelling



Always check that you have spelt words correctly. Which kind of words do you tend to misspell?

- Long words (e.g. **matemáticas**)
- Words with lots of vowels (e.g. **ciencias**)
- Words that are similar to English words, but spelt differently (e.g. **tecnología**)
- Accents are important in Spanish. They show where the stress falls in a word, e.g. *informática, religión*.
- Also make sure you know when to use *ñ* rather than the letter *n*, e.g. *español*.



Checking your grammar

It's also important to check for grammatical accuracy. Always check:

- Verb endings (e.g. *estudiar/estudio/estudias*)
- Me gusta/Me gustan*
- Definite articles (*el/la/los/las*)
- Indefinite articles (*un/una/unos/unas*)
- Adjectival agreement (e.g. *fea/fea/feos/feas*)

General Revision

Websites and further reading:

- Search on www.quizlet.com for 'Viva 1, M3'
- Use Module 3 in your textbook and on www.pearsonactivelearn.com (Viva 1<Module 3)
- Go on Linguascope; Languagesonline; Memrise; Kahoot; Duolingo;

Key vocabulary:

- Practise vocabulary at home and/or with a friend at school every week: **Look, cover, write, check.**
- Tick off the vocabulary lists as you complete them.
- You need to be able to understand all the words.

Key content:

- You need: **Key questions** **School Subjects** **Opinion phrases and adjectives**
School facilities **Days of the week** **Lunchtime activities with I**
Sequencers & Time phrases

High Frequency Words:

- Pues* (Then)
- También* (Also)
- Tampoco* (Nor/neither)
- (No) me gusta(n)* (I like)
- Odio* (I hate)
- Me encanta (n)* (I love)
- ¿Por qué?* (Why?)
- Porque* (because)
- Algo* (Something)
- Pero* (But)

Activities to help you consolidate the learning:

- Interviewing about the school day, subjects and opinions
- Creating a diary or illustrated timetable
- Creating a poster about your school

Present tense verbs

There are three groups of verbs in Spanish:

-ar verbs		-er verbs		-ir verbs	
<i>estudiar</i>	to study	<i>comer</i>	to eat	<i>vivir</i>	to live
<i>estudio</i>	I study	<i>como</i>	I eat	<i>vivo</i>	I live
<i>estudias</i>	you study	<i>comes</i>	you eat	<i>vives</i>	you live
<i>estudia</i>	he/she studies	<i>come</i>	he/she eats	<i>vive</i>	he/she lives
<i>estudiamos</i>	we study	<i>comemos</i>	we eat	<i>vivimos</i>	we live
<i>estudiáis</i>	you (plural) study	<i>coméis</i>	you (plural) eat	<i>vivís</i>	you (plural) live
<i>estudian</i>	they study	<i>comen</i>	they eat	<i>viven</i>	they live

Silly videos to help you remember your verb endings:
Conjugation style:

https://www.youtube.com/watch?v=4XnM3S_GvIM

ConjugationsBack

<https://www.youtube.com/watch?v=4Ex3k3yKjYk>

Websites to practise:
www.conjuguemos.com

Term 4 Week 1 & 2 -

- Using numbers
- Understanding gender of nouns
- Describing family and discussing what a family is



¿Cuántas personas hay en tu familia? How many people are there in your family?

En mi familia hay...	In my family, there are...	mis primos	my cousins
personas.	people.	¿Cómo se llama tu madre?	What is your mother called?
mis padres	my parents	Mi madre se llama...	My mother is called...
mi madre	my mother	¿Cómo se llaman tus primos?	What are your cousins called?
mi padre	my father	Mis primos se llaman... y...	My cousins are called... and...
mi abuelo	my grandfather	su hermano	his/her brother
mi abuela	my grandmother	sus hermanos	his/her brothers
mi bisabuela	my great-grandmother		
mi tío	my uncle		
mi tía	my aunt		

Los números 20 – 100 Numbers 20 – 100

veinte	20	setenta	70
treinta	30	ochenta	80
cuarenta	40	noventa	90
cincuenta	50	cien	100
sesenta	60		

This is CORE vocabulary for this topic.

- Knowing colour and adjective description for hair and eyes
- Describing you physical appearance
- Using adjectival agreement rules



¿De qué color tienes los ojos? What colour are your eyes?

Tengo los ojos...	I have... eyes.	marrones	brown
azules	blue	verdes	green
grises	grey	Llevo gafas.	I wear glasses.



¿Cómo tienes el pelo? What's your hair like?

Tengo el pelo...	I have... hair.	rizado	curly
castaño	brown	largo	long
negro	black	corto	short
rubio	blond	Soy pelirroja/a.	I am a redhead.
azul	blue	Soy calvo.	I am bald.
liso	straight		



Term 4 Week 3 & 4 -

- Describing other people
- Using the verbs to be and to have (SER and TENER)
- Describing physical and character features of different people
- Discussing diversity



¿Cómo es? What is he/she like?

Es...	He/She is...	joven	young
No es muy...	He/She isn't very...	viejo/a	old
alto/a	tall	Tiene pecas.	He/She has freckles.
bajo/a	short	Tiene barba.	He has a beard.
delgado/a	slim	mis amigos	my friends
gordo/a	fat	mi mejor amigo/a	my best friend
guapo/a	good-looking	su mejor amigo/a	his/her best friend
inteligente	intelligent		

This is CORE vocabulary for this topic.

Gramática

Tener (to have) is a useful irregular verb. It follows the pattern below:

tengo	I have	tenemos	we have
tienes	you have	tenéis	you (plural) have
tiene	he/she has	tienen	they have

Ser (to be) is another useful irregular verb.

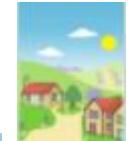
soy	I am	somos	we are
eres	you are	sois	you (plural) are
es	he/she/it is	son	they are

- Knowing types of house
- Talking about where you and others live
- Comparing features of life in Spain and the UK



¿Cómo es tu casa o tu piso? What is your house or flat like?

Vivo en...	I live in...	cómodo/a	comfortable
una casa	a house	grande	big
un piso	a flat	moderno/a	modern
antiguo/a	old	pequeño/a	small
bonito/a	nice		



¿Dónde está? Where is it?

Está en...	It is in...	un pueblo	a village
el campo	the countryside	el norte	the north
la costa	the coast	el sur	the south
una ciudad	a town	el este	the east
el desierto	the desert	el oeste	the west
la montaña	the mountains	el centro	the centre



Term 4 Week 5 -

- Reading skills
- Looking up words in a dictionary
- Intercultural Understanding: Reading about Carnival celebrations in Spanish-Speaking countries

SKILLS

Looking up nouns

Only use a dictionary as a last resort. Look for cognates/hear-cognates first, or try to work out new words from the context.

In a dictionary, nouns are listed in the singular form. For example:

padrastro (m)
stepfather

canción (f)
song

mASCULINE noun

fEMININE noun

If you come across a noun that is plural, take **-s** or **-es** off the word before looking it up.

Looking up adjectives

In a dictionary, adjectives are listed in the masculine singular form. For example:

disfrazado (adj)
disguised, in fancy dress



- Speaking skills
- Preparing and delivering a video about yourself

Writing a description

Write your answers out in full to begin with. Stick to language you know, and try to include:

- connectives (such as **y**, **porque**)
- intensifiers (such as **muy**, **bastante**)
- adjectives (such as **simpático**)
- opinions (such as **me encanta...**)



Giving a presentation

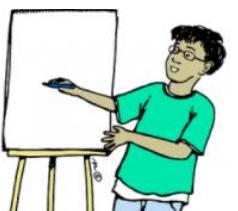
When you give a presentation, try to speak from notes (not a full written version of what you want to say). This will help you to sound more natural. Put key words and visual prompts on a card, like this:

= Me llamo David. Tengo doce años. Soy muy simpático y bastante inteligente. Tengo los ojos azules y el pelo castaño, corto y rizado. Vivo en Newcastle, en una casa grande...

David, 12
simpático, inteligente

Newcastle

grande



General Revision

Websites and further reading:

- Search on www.quizlet.com for 'Viva 1, M4'
- Use Module 4 in your textbook and on www.pearsonactivelearn.com (Viva 1<Module 4)
- Go on Linguascope; Languagesonline; Memrise; Kahoot; Duolingo;

Key vocabulary:

- Practise vocabulary at home and/or with a friend at school every week:
Look, cover, write, check.
- You need to be able to understand all the words.
- Tick off the vocabulary lists as you complete them.



Key content:

- You need: **Key questions** **Family members** **Hair and Eye Descriptions**
Character and Physical adjectives **Types of House** **House Descriptions**

High Frequency Words:

- Hay (There is/there are)
- Tengo (I have)
- Tiene (He/she/it has)
- Vivo en (I live in)
- Los ojos (Eyes)
- El pelo (Hair)

Palabras muy frecuentes	High-frequency words
además	also, in addition
bastante	quite
porque	because
muy	very
¿Quién...?	Who?
un poco	a bit
mi/mis	my
tu/tus	your
su/sus	his/her

Activities to help you consolidate the learning:

- Creating and illustrating a family tree or similar
- Creating a profile of someone in your family, a celebrity or someone you admire
- Creating a monster and writing its physical/character description
- Giving a presentation about yourself
- Interviewing others and presenting material back about them –using different parts of the verb
- Reading profiles and descriptions
- Designing and describing a house

Gramática

Tener and ser are very useful irregular verbs.
Learn how to use them to talk about yourself and other people.

tener	to have	ser	to be
tengo	I have	tenemos	we have
tienes	you have	tenéis	you (plural) have
tiene	he/she has	tienen	they have

Tengo los ojos azules y soy pelirrojo. I have blue eyes and I am a redhead.
Tiene sesenta años y es calvo. He is sixty years old and bald.

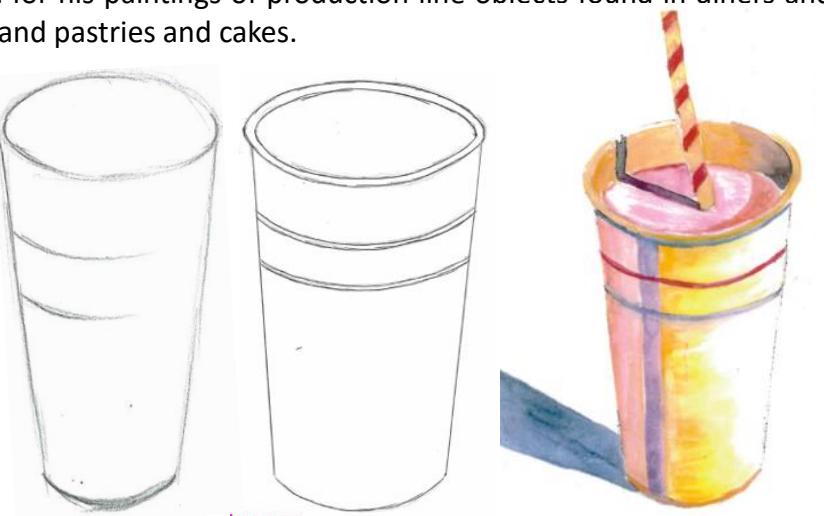
Wayne Thiebaud

Week 1-3

In term three you will study the work of famous American painter Wayne Thiebaud. You will identify elements of Thiebaud style and use what you learn to expand your drawing and water colour painting skills.

Below are some of the main features of his work.

- Thiebaud uses heavy pigment (paint) and exaggerated bright colours when painting.
- 3D Form is shown through well-defined shadows in dark hues of blue and brown that contrast with neutral background colours.
- Thiebaud is considered a part of the pop art movement due to his painting of objects from popular culture. He also uses repetition of simple shapes and lines to create graphic images in the style of the pop artists.
- Thiebaud is well known for his paintings of production line objects found in diners and cafeterias, such as pies and pastries and cakes.



You will recreate "Three Milkshakes" by Wayne Thiebaud. You will learn how to create this 3D shape using the Ellipse. You will also practice your application of water colour paint and learn how to mix tertiary colours that appear in this painting. Could you practice using the images above for guidance?

Pivotal Rotation

Week 4-6

In the second half of this term we will create our own Pop Art pieces using the work of Wayne Thiebaud as inspiration. You will follow the principles of his work using easily recognisable subject matter, bold colours and repetition.



The final design (shown to the left) will be created using Pivotal rotation. To do this you will...

- Make an observational drawing of your chosen subject matter.
- You will then repeat this design around a centre point using the trace and transfer technique.
- You will need to follow lines of symmetry to achieve different patterns.
- You will then colour the piece in the style of the pop artists using colour gradient and the rule of three.

Theory – Exploring Pulse

This unit introduces the Ukulele as a the first taught stringed instrument.

We will learn about the structure and sound of guitars and focus on the Ukulele. We will learn about the strings, tuning and how to play chords. We will learn simple songs and rehearse and perform them as a class and small ensembles.

We will listen to ukulele music and understand why it is used in certain styles of music for its unique sound.



What is a UKULELE?

The ukulele is a member of the lute family of instruments of Portuguese origin and popularized in Hawaii. It generally employs four nylon strings. The tone and volume of the instrument vary with size and construction. Ukuleles commonly come in four sizes: soprano, concert, tenor, and baritone.

Factual Inquiry Questions:

- How is the Ukulele different to the guitar?
- What is the purpose of the guitar?
- Why is Ukulele so popular?



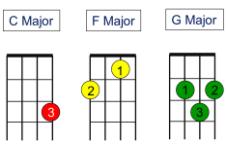
What key theory will we study?

The structure and timbre of different styles of guitar

Chord tabs

Key words when learning how to play Ukulele

Chords, Techniques, Tabs, Plectrum, Timbre, Structure, Form, Soprano, Tenor, Baritone, Concert, Fret, Bridge, Tuning, Pitch, Major, Minor, 12 bar blues, Timing, Fluency, Accuracy, Articulation



Debatable Inquiry Questions:

- To what extent is this timbre important to musical style?
- To what extent do we need different stringed instruments in music?

Week 1 - 2

Learn, Rehearse, Perform

Week 3 - 6

C ///	C ///	C ///	C ///
F ///	F ///	C ///	C ///
G ///	F ///	C ///	C ///

Perform

We will be performing on the ukulele in small groups as well as a class ensemble



What will we perform?

We will look at a range of songs including Next to Me, Let It Be and I'm yours.

Performance questions

- Can you play as an ensemble and in time with the group?
Are you able to change chords easily?**

How do you compose effectively?

Self Discipline: To be able to work independently and stay on task

Collaboration: To work positively with your partner

Repetition: To practice your use of skills over and over again to improve.

Analyse: To listen to your work and be able to make sure you have correct time, notated score and are playing correctly

Performance

Are you able to confidently perform as a class?

Have you practiced your group pieces so that your chords are played with fluency?

Can you analyse your own and others' performances?

Introduction to Dance

Week 1 - 2

What is Dance?

The definition of a dance is a group of rhythmic movements and steps set to music or a social gathering where people participate in rhythmic movements and steps set to music.

Why is warm up important in dance?

Warming up helps prepare your body for aerobic activity. A warmup gradually revs up your cardiovascular system by raising your body temperature and increasing blood flow to your muscles. Warming up may also help reduce muscle soreness and lessen your risk of injury.

Basic Body Actions

Jump - to move your body upward from the ground and often forward, backward, or sideways through the air by pushing with your legs

Gesture - a movement of part of the body, especially a hand or the head, to express an idea or meaning.

Balance - an even distribution of weight enabling someone or something to remain upright and steady.

Travel - This can involve the stationary movement of body weight from one part of the body to another or the travelling movement of a person or group from one area to another.

Transfer of Weight - A weight transfer or weight change is dancer's movement so that their weight is moved from one supporting foot (or supporting limb/body part) to another one fully or partially.

Turn – a rotation of the body about the vertical axis.

What are Dance Relationships?

Unison: Completing the same movement at the same time.

Canon: Completing the same movement one after another when in a group

Mirroring: Completing a movement in opposition facing each other.

Accumulation: Completing the same movement repeatedly as more dancers join in with the movement.



Week 1 - 2

Create, Rehearse, Perform

Week 3 - 5

Creative Process

Improvisation: Improvisation is a drama method which involves experimenting and creating in the moment without any pre planned dialogue or expectations for the scene. Improvisation is used in the early stages of creating your own work.

Collaboration: working with others to produce a piece of work.

Practising: Is the process of developing a performance and repeating sections to improve and refine the skills used.

Rehearsal: Is the process of practicing your performance as a full performance.

How do you rehearse effectively for a performance?

Self Discipline: To be able to work independently and stay on task

Collaboration: To work positively with others in your group

Repetition: To practice your use of skills over and over again to improve.

Reflection: To look at your work and understand how to improve it and be able to listen and implement feedback from others.

What are Performance skills in Dance?

Physical Skills:

Balance - A steady or held position achieved by an even distribution of weight.

Alignment - Correct placement of body parts in relation to each other.

Control - The ability to start and stop movement, change direction and hold a shape efficiently.

Posture - The way the body is held.

Co-ordination - The efficient combination of body parts.

Expressive Skills:

Facial Expression - Use of the face to show mood, feeling or character.

Focus (Use of) - Use of the eyes to enhance performance or interpretative qualities.

Spatial Awareness - Consciousness of the surrounding space and its effective use.



Cultural Dance: Brazilian

Week 6 - 7

**What is cultural dance?**

Culture is defined as our way of life

The tradition and norms which is important in every culture can be represent in a way of dancing and this is what we called cultural dance. A graceful dance, colorful props and costumes, slow movements and fast that catches the attention of every people. Cultural dancers are like story tellers, telling the story in every movements and sequence of their dance.

Why is dance important within a culture?

Dance is important to different cultures because is a universal language that everyone can understand. Cultural Dance is really important, it is a way to share with other people what they need to know about a culture. It is also the way that other people can gain respect, knowledge and give importance to traditions and norms within a culture.

Rio Carnival?

The Carnival in Rio de Janeiro (Portuguese: Carnaval do Rio de Janeiro) is a festival held every year before Lent; it is considered the biggest carnival in the world, with two million people per day on the streets. The first Carnival festival in Rio occurred in 1723. The Carnival has a section dedicated to the Samba Schools. They perform in the Sambadrome, which runs for four nights. Each school centers their performance around a chosen theme that is acted out through a team of musicians, samba dancers and elaborately decorated floats after months of preparation.



Create, Rehearse, Perform

Week 8 - 10

**What is dance repertoire?**

Repertoire is the term used to describe any dance or part of a dance, that is taken outside of the performance in which it exists. It can also describe the list of dance performances that a company performs.

Who are Rambert Dance Company?

Rambert is Britain's oldest dance company. We gave our first performances in 1926. Our history dates even further back, to 1914, when Polish emigree and former Ballet Russes dancer Marie Rambert arrived in London fleeing the outbreak of the First World War.

In London she supported herself by giving tuition in dance and eurhythms. At the same time she continued with her own ballet studies, as well as performing as a soloist. Two years later she opened a school of dancing in Bedford Gardens, Kensington.

A Linha Curva – Key Information

A Linha Curva is Rambert's party piece: a riotous explosion of sexy, colourful, samba-fuelled dance. The work features 28 performers, a massed bank of percussion and dramatic lighting – the cumulative effect has audiences on their feet and cheering.

Brazilian Dance Features:

Dynamics: Sharp/Smooth, Fast/Slow, Sudden/ Sustained

Levels: Low, Medium and High

Dance Relationships: Mirroring, Unison and Canon, Accumulation.

Formations: The shapes a group performs in.



Overview on H&S

Week 1 - 2

Design and Technology Product Design		
A: Tools and equipment		
Name of tool	Picture	What the tool is used for
Tenon saw		A hand saw with a stiff back used to cut straight lines in wood.
Coping saw		A hand saw used to cut curves and complex shapes in wood and plastic.
File		Used to shape or smooth the wood, metal or plastic.
Rasp		A coarse (rough) form of file used for coarsely shaping wood, metal or plastic.
Jig saw		A machine saw used to cut complex shapes in wood and plastic.
Disc sander		A machine used to smooth the edges of materials.
Pillar drill		A machine used to make holes in materials.

B: Ergonomics

- The relationship between people and the products which they use.
- Ergonomics considers the comfort of the user.
- Ergonomics also considers the force a person can apply, for example when using a tin opener, or the pedals of a car.



Anthropometric data

- People are not all the same size
- Designers need to be aware of this when developing new products
- Designers use anthropometric data to make sure their designs are suitable for the intended user
- Anthropometric data is collected by studying human measurements



Analysing anthropometric data

Hey diddle diddle the Median's the middle
You add then divide for the Mean
The Mode is the one you see the most
And the Range is the difference between

Sustainability

- Trying to control the reduction in the number or quantity of natural resources in order to maintain an ecological balance. (for nature to remain unchanged)
- It is important for designers to consider the sustainability of their designs, including the materials and manufacturing processes they use, in order to limit the negative impacts on the environment.
- Renewable materials are materials which can be replaced and will not run out e.g. trees to make wood and paper.
- Non-renewable materials are materials which cannot be replaced e.g. oil to make plastics.

C: Keywords

- ergonomics: designing products which are comfortable to use
- anthropometrics: the use of human measurements to make sure designs are suitable for the intended user
- iterative design: a cyclic design approach where designs are tested, evaluated and refined a number of times
- modelling: making a physical example of a design to test its success
- template: a pattern used to help cut material accurately
- sustainable: naturally replenished (replaced) within a short period of time
- sustainability: the ability to be maintained at a certain rate or level
- testing: checking the suitability of a design or product in use
- evaluation: assessing the strengths and weaknesses of something

E : Important Symbols



Eye protection must be worn

Protective gloves must be worn



D: Health and Safety

- listen to your teacher's instructions
- always wear an apron
- long hair should be tied back
- don't use any equipment you have not been shown how to use by your teacher
- always stand up during practical lessons
- when using machines always wear safety glasses
- always carry tools pointing downwards
- only use the stop button in an emergency
- work quietly and be sensible and careful at all times

Revision Checklist

I understand the health and safety rules	
I can name the tools and draw them without looking at the pictures	
I know what the tools are used for	
I understand the role of ergonomics, anthropometrics and sustainability in design	
I can spell the keywords and know what they mean	

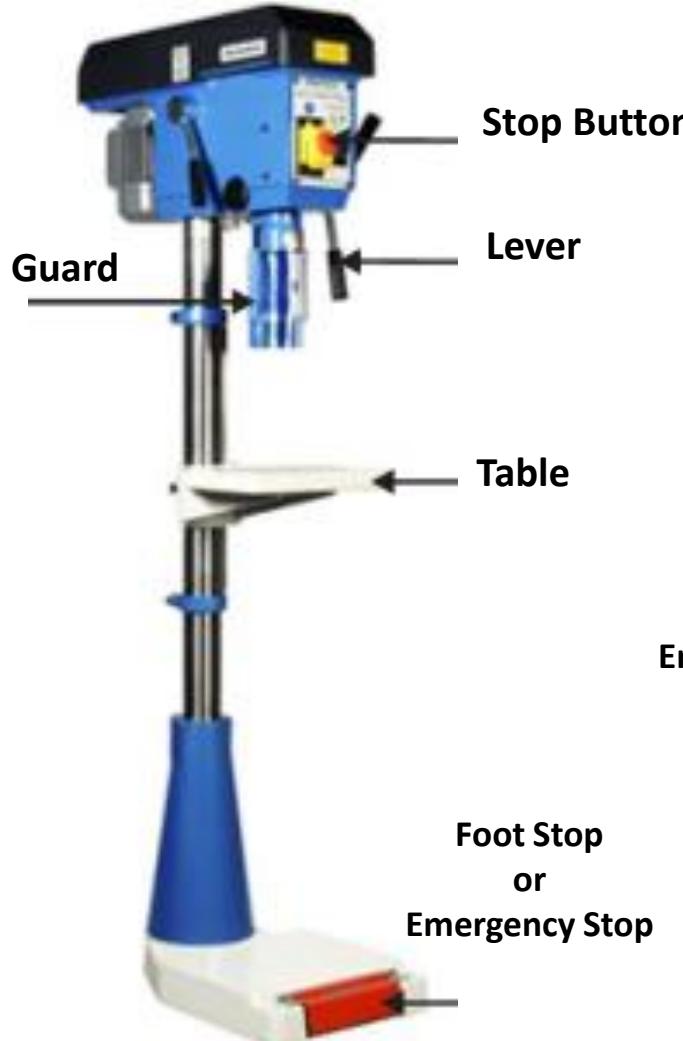


Design & Technology
Department Values

Leadership
Organisation
Respect
Independence
Creativity

Machine and Equipment

Week 3- 4



MDF

Tenon Saw

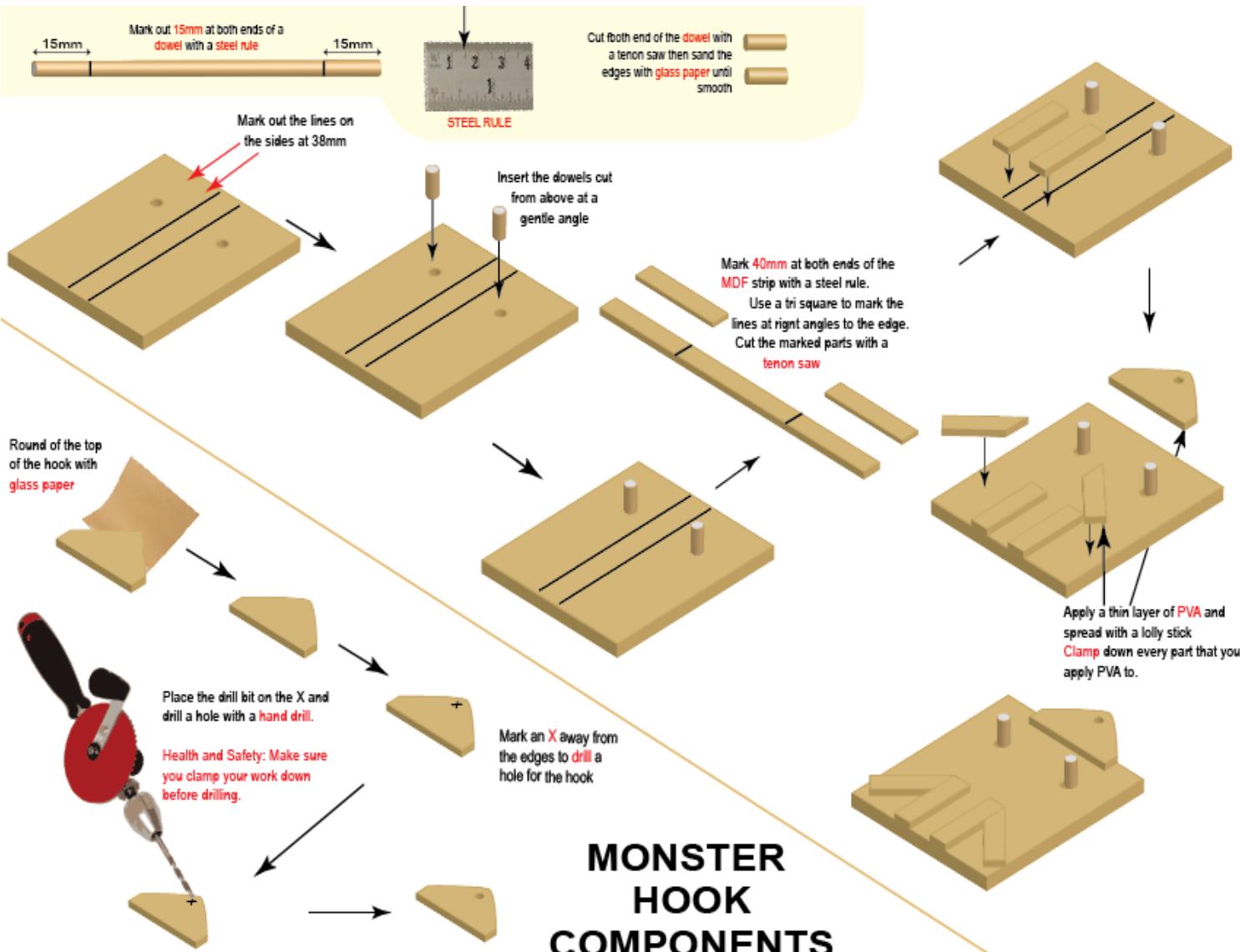
Hand Drill

Plywood

Machine and Equipment

Week 5 - 6

Start



Create a flowchart in the below showing how to make your monster hook

Skills of the Designer

CONTEXT:

- ✓ Isometric sketching/drawing
- ✓ 1point perspective sketching/drawing
- ✓ 2point perspective sketching/drawing
- ✓ 3rd Angle orthographic projection
- ✓ Using drawing aids
- ✓ Photo tracing

AIM HIGH OPPORTUNITIES:

- Freehand 3D drawing of complex shapes
- Adding shadows to drawings
- Rendering textures
- Using CAD software

CONSOLIDATING & EMBEDDING:

- o Basic 2 & 3 D drawing
- o Importance of illustrating ideas
- o Visualising in 3D

KEY TIMELINE:

- 1) Why is Sketching important.
- 2) Differing drawing methods – key points
- 3) Isometric sketching / using grids
- 4) Isometric exercise
- 5) 1point perspective
- 6) 1point perspective exercise
- 7) 2point perspective
- 8) 2point perspective exercise
- 9) 3rd angle orthographic plans
- 10) Drawing aids – Isosketch tool, DT Microdot, Iso-Cube, other stencils
- 11) Thick and thin line technique.
- 12) Rendering and shading textures

Note: This unit of work can be run in parallel with other units. It can also be delivered in chunks when appropriate i.e. Isometric might be a focus to begin with and then perspective covered later on. Students should be encouraged to practise the techniques to help them improve. The drawing aids are made available to those that can make use of them rather than expecting all students to make use of them.

LITERACY:

- Linked key words and phrases.
- General written work and labelling.
- Describe, explain, justify
- Review, reflect, suggest
- SPAG

HEALTH & SAFETY:

- D&T code of practice.
- Room specific signage.
- Aprons during practical work.
- Google when using machinery.
- One person to one machine
- Sanitize hands
- Use tool and equipment for your bubble.

NUMERACY:

- Accurate measuring in millimetres
- Scale and proportion
- Reading from plans
- Dimensioning
- Angles / basic geometry.

ASSESSMENT:

- D&T SPECIFIC:
 - Design
 - Make
 - Evaluate
 - Know
 - Communicate



GENERIC:

- Progress
- Written feedback
- Verbal feedback
- Self assessment (www.ebi.com)
- Peer assessment
- Whole school literacy codes

EXTERNAL LEARNING:

- www.technologystudent.com
- Graphics section as reference
- Practise techniques at home

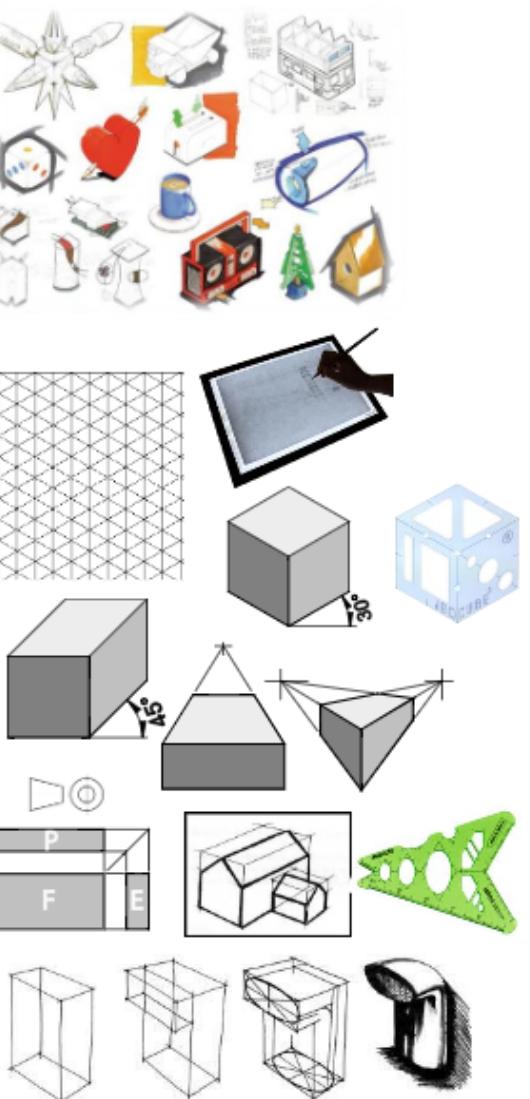
MATERIALS / SIZES:

- A4 paper
- A3 paper
- A4 isometric grid paper
- A3 isometric grid paper

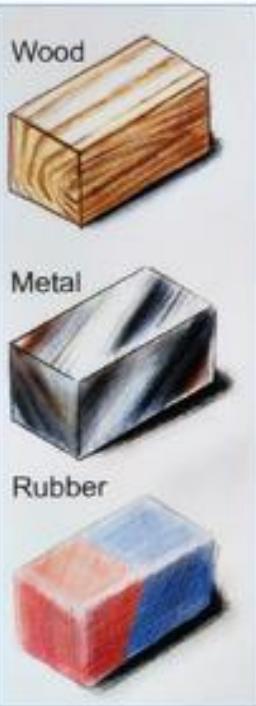
Notes

- Independent task
- Using drawing equipment
- Illustrating ideas and solutions
- Rendering drawings with texture
- Drawing aids available to support
- External practise to consolidate
- ACCESSFM

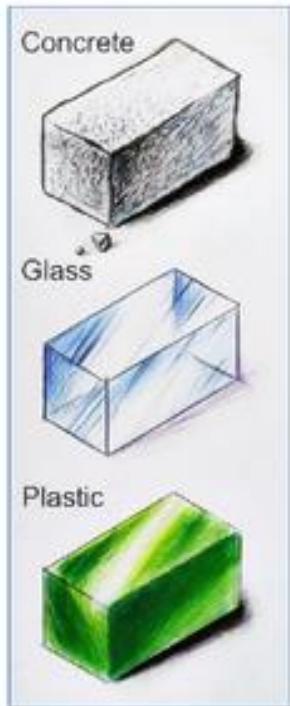
Flipped Learning



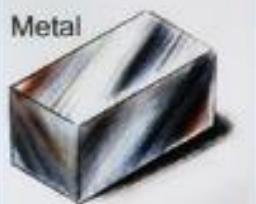
Rendering Examples



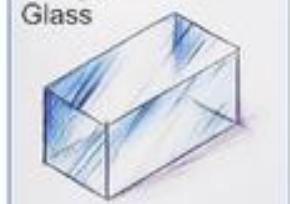
Wood



Concrete



Metal



Glass



Rubber



Plastic



WOOTTON PARK

'Ipsum quod faciendum est diutius durat'

Week 1 – Introduction to F&N/Washing Up

Food & Nutrition

Food and Nutrition is a brand new subject at Wootton Park School!

1. What topic areas do you think we will study in F&N lessons?
2. What topic areas would you particularly like to study?
3. Have you ever cooked before at primary school or have you studied food topics before?
4. Do you like to cook at home? If so, what is your favourite dish?
5. What do you understand by the 'carousel system' in Design & Technology?

Washing Up

Washing up correctly is very important for food safety otherwise this can be a great place for bacteria to grow and potentially cause food poisoning. You will need:

- **Washing up bowl**
- **Washing up liquid**
- **A clean washing brush, cloth or sponge**
- **A tea-towel for drying**
- **Anti-bacterial spray**



Steps for washing up correctly:

- 1.) **Scrape** food from pans, dishes and cutlery into the bin
- 2.) **Stack** everything next to the sink (NOT ON THE DRAINING BOARD.)
- 3.) **Rinse** the dirtiest things under a running tap. Leave to one side.
- 4.) **Run hot water** into the bowl and add a small amount of **washing up liquid**.
- 5.) Using the **brush/cloth/sponge**, wash the cleanest items first.
- 6.) **Rinse** each item once clean to remove bubbles.
- 7.) Allow items to **drain** for as long as possible on the clean draining board.
- 8.) If the water looks dirty or becomes cool, empty and refill with fresh hot water and liquid.
- 9.) **Dry** everything with a clean tea towel.
- 10.) Put everything back where it came from.
- 11.) Carefully **empty out** the water from the bowl.
- 12.) Pick out any food from the plughole and **wipe** around the sink and bowl with **antibacterial spray** and a **wet cloth**.

Week 2 – Hygiene and Safety Rules

Food Hygiene and Safety Rules

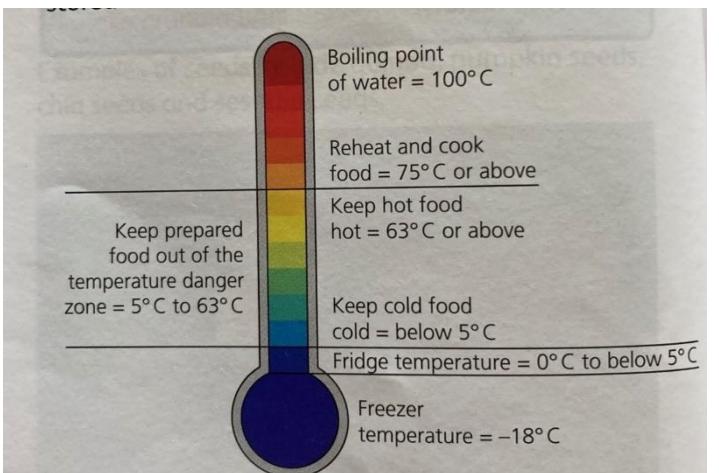
1. Tie back long **hair** when cooking.
2. Remove all **jewellery** on hands and wrists.
3. Wear an **apron** when cooking.
4. Wash hands with warm **water** and **soap** and dry them with **paper towels**.
5. Wash hands regularly whilst cooking, particularly if you **cough**, **sneeze**, **handle raw food** or visit the **toilet**.
6. Hold sharp **knives** with the blade pointing down and use the '**bridge and claw**' techniques.
7. Turn **pan handles inwards** when cooking.
8. Cover all cuts with a **blue plaster**.
9. **Do not touch face or hair** when cooking. If you must, then wash hands afterwards.
10. Use **oven gloves** to put food in and take food out of the oven.

Some Key Equipment



Temperature and Storage of Food

It is important to cook, reheat and store food at the correct temperature to avoid **food poisoning**. Bacteria will multiply most quickly in the **danger zone** as outlined below:



Week 3 – Practical: Fruit Salad

Equipment Required:

- 1 vegetable knife
- 1 chopping board
- 1 colander or sieve
- A tin opener if you need one
- 1 tablespoon



Recipe:

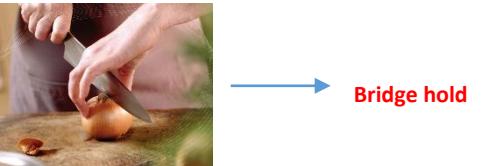
Ingredients

Up to 5 different fruits from the following list:

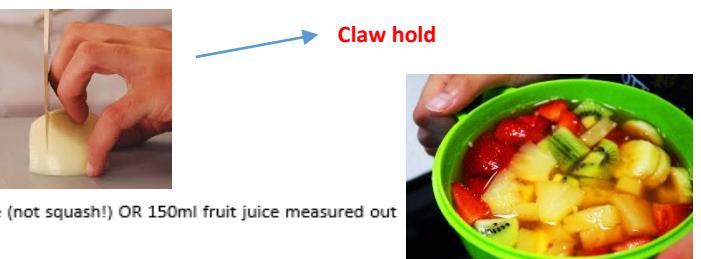
- 1 x banana
- 1 x apple
- 1 x satsuma
- Handful of strawberries
- Handful of grapes
- 1 x tin of pineapple slices in natural juice
- 1 x pear
- 1 x kiwi fruit

You also need to bring a small carton of fruit juice (not squash!) OR 150ml fruit juice measured out into a suitable container.

Please also bring a large plastic container with a lid to take your fruit salad home in



Bridge hold



Claw hold

At the end of the practical lesson:

Fill your bowl with hot and soapy water.

Ensure your draining board is clear and clean.

Wash the cleanest item first, using the washing up brush to clean.

Place each clean item on the draining board.

Dry all equipment with a tea towel.

Return them back to the correct cupboard or tray.

Clean all surfaces with anti-bacterial spray and a wet dishcloth.



Week 4 - Evaluations

The 4 C's of Food Hygiene & Safety

Cleaning - keeping work surfaces, equipment and yourself clean. This is important to minimise bacterial growth.

Cross-Contamination – keep raw and ready-to-eat food separate to ensure that cross-contamination of bacteria does not occur.

Chilling - keep high risk foods chilled between 0-5°C. Cool hot food quickly but do not place hot food in the fridge.

Cooking – Cook food thoroughly and always above 75°C. Reheat food only once. Use a temperature probe to monitor the core temperature of food.

Reflecting on our fruit salad practical

We still start by producing a set of '**success criteria**' for an evaluation. What makes a good quality one? What would I want to see as your teacher?

Examples of success criteria points:

- Answer all **questions fully**
- Consider your **presentation**
- Give **reasons for your answers** when required
- Use Food & Nutrition keywords when discussing **skills and equipment**
- Use appropriate sensory language when describing the **flavour, texture, appearance and smell** of food

Self-assessment of evaluations

Place a tick or cross next to each success criteria point depending on whether you feel you have done this in your evaluation or not.

Then, underneath your success criteria, complete a '**WWW**' and '**EBI**' for your evaluation using your ticks and crosses to help you.

The final step is to go back to your evaluation and make improvements in green pen using your own feedback.

Remember to self-assess in green pen

You could also complete this as a peer assessment task

Week 5 – Practical: Fruit Crumble

Equipment Required:

2 x tablespoons		1 mixing bowl	
Oven Gloves		1 table knife	

Ingredients:

For the topping:

200g Plain **flour**
 75g caster **sugar**
 50g **Butter/Hard Margarine**

For the filling:

50g **sultanas/raisins** (optional)
 1 large tin of **fruit** filling
 OR
 1 large tin of fruit in natural juice e.g. sliced apples
 OR
 Roughly 400g fruit prepared at home the night before the lesson

Key Skill: Rubbing in Method



Method:

- 1.) Preheat the oven to 190°C or Gas 5.
- 2.) If using freshly prepared fruit, **pour** this into the oven proof dish you are using.
 OR open the cans of apples and drain half the liquid away into the sink. Arrange the fruit slices in an oven proof dish and then add the sultanas/raisins (if using) and the remaining liquid from the can.
 OR tip the tins of fruit filling into the ovenproof dish.
- 3.) Now make the crumble. **Rub the fat into the flour until it resembles breadcrumbs.**
- 4.) **Stir** in the sugar.
- 5.) **Sprinkle** the crumble topping over the fruit.
- 6.) **Bake** for 25 – 30 minutes, until the crumble is golden.

Week 6 – Design & Make Task

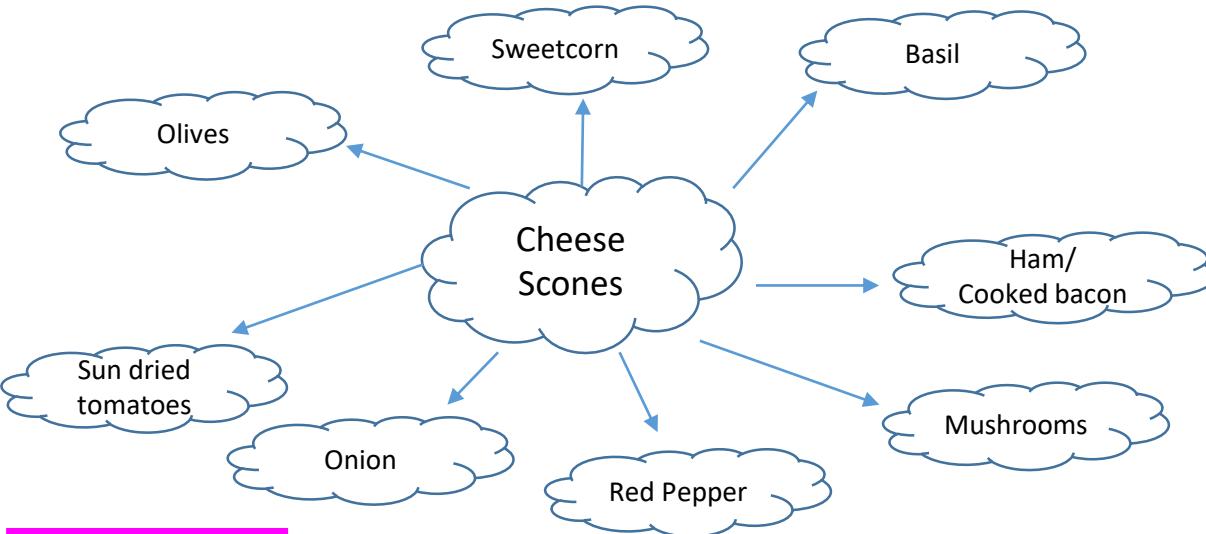
Savoury Scones: Basic Recipe

200g self-raising **flour**
 50g **hard margarine /butter**
 150ml **milk**
 50g grated **cheddar cheese**



Mind Map of Ideas

Other ingredients which work well in savoury scones:



What makes a good quality scone?

- **Well risen**
- **Golden brown**
- **Even rise**
- **Consistent shape**
- Use **oven gloves** to put your scones in and taking them out of the oven.
- Ask a partner to hold open the **oven door** for you so it does not swing back.
- **Bend** your knees and **slide** the tray carefully onto the shelf.

Using the oven safely:

Week 7 – Practical: Scones

Equipment Required:

- 1 mixing bowl
- 1 sieve
- 1 table knife
- 1 jug
- 1 fork
- 1 round cutter
- 1 baking tray
- 1 pastry brush
- 1 cooling rack



Ingredients:

- 200g self-raising flour
- 50g hard margarine /butter
- 150ml milk
- 50g grated cheddar cheese
- Extra ingredients as planned



Method:

- 1.) Set the oven to 200°C Gas 7.
- 2.) Sieve the flour into a bowl.
- 3.) Rub the margarine/butter into the flour with your fingertips until it resembles breadcrumbs.
- 4.) Stir in the grated cheese and extra ingredients and mix with a table knife.
- 5.) Add milk gradually until you have a soft ball of dough that is not too sticky. Mix lightly and quickly with a table knife. You may not need it all.
- 6.) Turn the dough onto a lightly floured surface and knead lightly for 30 seconds. Handle the dough as little as possible to prevent it becoming tough.
- 7.) Lightly pat out the dough to a 2cm thickness and cut into shapes with a cutter.
- 8.) Place the scones close together on a greased tray. Glaze lightly with the remaining milk using a pastry brush.
- 9.) Bake the scones for 10-15 minutes. When cooked, remove from the oven and place on a cooling rack.

Week 1

An Introduction to computational thinking;

Understanding how decomposition, pattern recognition abstraction and algorithm's are used when solving problems.



Extended learning: <https://www.bbc.co.uk/bitesize/guides/zp92mp3/revision/1>

89537 ?

Week 2

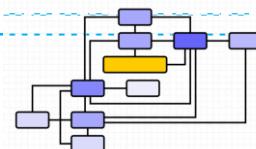
Using pattern recognition in computational thinking;

Exploring how the use of pattern recognition can solve problems by comparing what has been experienced in the past and applying to a chosen difficulty.

Extended learning: <https://medium.com/tech-based-teaching/thinking-in-patterns-a-brief-intro-to-pattern-recognition-4c33258acad>

Week 3

Understanding algorithms;



Algorithms are a set of step by step instructions that are used by people and computers in society. They can take the form of a set of instructions, pseudocode, block programming (like in Scratch), programming languages like Python to binary code. Practice coding by completing some hour of code challenges.

Extended learning: <https://code.org/learn>



Week 4

Control using coding;

Understanding how computer code can lead to the automation of mechanics.

Developing algorithms that demonstrate Boolean logic.

Scratch programming will help develop wait, forever, IF and repeat features used in modern coding.

Extended learning: [https://projects.raspberrypi.org/en/projects?software\[\]=%5B%5D=scratch](https://projects.raspberrypi.org/en/projects?software[]=%5B%5D=scratch)

Week 5

Robots in agriculture;



The automation of repetitive tasks in industry and agriculture is revolutionising the world in which we are living. Understanding the advantages and disadvantages as a result is important.

Extended learning: <https://interestingengineering.com/9-robots-that-are-invading-the-agriculture-industry>



Week 6

Applying computational thinking in coding;

Using decomposition, pattern recognition and abstraction when planning and creating algorithms will impact on the success of the coding program. Developing more skills and confidence in coding techniques is crucial for future progress. Extend your knowledge to use operators and variables.

Extended learning: https://www.youtube.com/watch?v=jFLO_hVSn-Y

Key Skills

- Serve
- Dig
- Set
- Spike
- Drop Shot
- Block

Websites, further reading and local information.

Volleyball in Northampton - <http://northantsvolleyball.com/>

Best Volleyball Rallies -
<https://www.youtube.com/watch?v=P76OSDYJtbw>

Volleyball England - <https://www.volleyballengland.org/>

Volleyball at Wootton Park School

Volleyball is a team sport in which two teams of six players are separated by a net. Each team tries to score points by grounding a ball on the other team's court under organized rules. It has been a part of the official program of the Summer Olympic Games since Tokyo 1964. The complete set of rules is extensive, but play essentially proceeds as follows: a player on one of the teams begins a 'rally' by serving the ball (tossing or releasing it and then hitting it with a hand or arm), from behind the back boundary line of the court, over the net, and into the receiving team's court. The receiving team must not let the ball be grounded within their court. The team may touch the ball up to 3 times, but individual players may not touch the ball twice consecutively. Typically, the first two touches are used to set up for an attack, an attempt to direct the ball back over the net in such a way that the serving team is unable to prevent it from being grounded in their court.

Key Words

Disguise

Variety

Ready Position

Communication

Line Markings



Key Words

Disguise

Variety

Ready Position

Communication

Line Markings

Disguise:

A disguise is when you pretend to do one thing but end up doing something else to try and outwit your opponent.

Variety:

Variety is when you use a number of different skills during a game to outwit and opponent.

Ready Position:

The **ready position** is a neutral starting **position** from. Whenever you are receiving you should take up the **ready position**. It's also the neutral **position** which you should try to return to when your opposition has the volleyball.

Communication:

To be able to speak confidently and clearly to others.

This is key in Volleyball as when the volleyball comes onto your side you must communicate with your team mates.

Line Markings:

The boundary **lines** are the two side **lines** and end **lines**. The centre **line** divides the playing court into two equal courts, 9m x 9m each. This **line** extends from beneath the net from sideline to sideline.

Key Skills

- Basic Shapes – Tuck, Pike, Straddle
- Front Landings
- Back Landings
- Twists
- Somersaults

Trampolining at Wootton Park School

Trampolining or trampoline gymnastics is a recreational activity, acrobatic training tool as well as a competitive Olympic sport in which athletes perform acrobatics while bouncing on a trampoline. In competition, these can include simple jumps in the straight, pike, tuck, or straddle position to more complex combinations of forward and/or backward somersaults and twists. Scoring is based on the difficulty and on the total seconds spent in the air. Points are deducted for bad form and horizontal displacement from the centre of the bed.

Websites, further reading and local information.

Kat Driscoll British Championships - <https://www.british-gymnastics.org/gymnast-profiles/196354/katherine-driscoll>

Trampolining in Northampton - <https://www.ntga.co.uk/>

British Trampolining - <https://www.british-gymnastics.org/technical-information/selection/trampoline>

Kat Driscoll

Kat is one of Britain's leading trampoline gymnasts and has been for a number of years. She finished the 2011 season as the world number one both individually and in synchronized trampoline with partner Amanda Parker. At the 2012 Olympic Games she missed out on a final spot by just one place. In 2013, at the World Games, Kat was crowned women's synchro Champion with Amanda Parker repeating that feat at the World Championships along with winning team gold.

Key Words**Timing****Consistency****Height****Travel**

Key Words

Timing – to ensure that skills are executed accurately performers must time their moves correctly when bouncing on the trampoline.

Consistency – when performing a routine it is important that performers land on the middle of the trampoline and maintain the same height throughout.

Height – how high you perform skills in Trampolining.

Travel - describes movement away from the centre of the cross in excess of 50cms. Travel is caused by the Centre of Mass moving horizontally as well as vertically at last contact. This is also referred to as 'leaning off balance'

Key Skills

- Serve
- Backhand
- Forehand
- Slice
- Topspin
- Backspin

Websites, further reading and local information.

Table Tennis in Northampton -

<https://www.tabletennis365.com/Northamptonshire>

Best rallies at the Olympics -

<https://www.youtube.com/watch?v=jkeUQ76uVx4>

Table Tennis England - <https://tabletennisengland.co.uk/>

Table Tennis at Wootton Park School

Table tennis, is a sport in which two or four players hit a lightweight ball, also known as the ping-pong ball, back and forth across a table using small rackets. The game takes place on a hard table divided by a net. Except for the initial serve, the rules are generally as follows: players must allow a ball played toward them to bounce one time on their side of the table, and must return it so that it bounces on the opposite side at least once. A point is scored when a player fails to return the ball within the rules. Play is fast and demands quick reactions. Spinning the ball alters its trajectory and limits an opponent's options, giving the hitter a great advantage.



Fan Zhendong is a Chinese professional table tennis player who is currently ranked world No. 1 for men's singles by the International Table Tennis Federation (ITTF). After joining the Chinese National Table Tennis Team in 2012 as the youngest member of the team, he went on to become the youngest ITTF World Tour Champion and the youngest World Table Tennis Champion. He achieved the top spot in the world rankings after holding position No. 2 for 29 consecutive months, starting from November 2015.

Key Words

Slice

Topspin

Backspin

Ready Position

Grip



Key Words

Slice

Topspin

Backspin

Ready Position

Grip

Slice:

A **slice** resembles a **tennis slice**: the racket cuts underneath the ball, creating backspin causing the ball to float slowly to the other side of the **table**

Grip:

Grip in table tennis is the way one player holds the racquet. There are three different styles of holding a bat and different player has either one or both styles of holding the racquet.

Topspin:

Topspin strokes are created when your racket brushes against the ball using an upward action. This causes the ball to accelerate and dip. After the ball makes contact with your racket, the **topspin** will cause it to rebound in an upward direction.

Backspin

Backspin is a shot such that the ball rotates backwards (as though rolling back towards the player) after it is hit. This direction of spin creates an upward force that lifts the ball.

Ready Position:

The **ready position** is a neutral starting **position** from which all **table tennis** strokes can be played. Whenever you are receiving service in **table tennis** you should take up the **ready position**. It's also the neutral **position** which you should try to return to after playing your stroke during a rally.

Key Skills

- Passing – both off your right and left hands. Long, short, spin and pop passes.
- Tackling – safely and effectively
- Movement – with and without the ball.
- Ball presentation – during tackling and once tackled.
- Rucking – in isolation and competitively.
- Jackling - in isolation and competitively.

Websites, further reading and local information.

Rugby Rules -

http://news.bbc.co.uk/sport1/hi/rugby_union/rules_and_equipment/4200680.stm

England's World Cup Triumph -

<https://www.youtube.com/watch?v=CqswfjkPm2k>

Northampton Saints –

<https://www.northamptonsaints.co.uk/>

Northampton Casuals - <http://northamptoncasualsrfc.rfu.club/>

The Game of Rugby

Rugby at WPS will be enjoyable and fun sport for all learners, both boys and girls. Throughout the year each learner will be taught Rugby on the curriculum and each learner will have the opportunity to participate in Rugby during extra-curricular activities.

The Rugby World Cup is the third biggest sporting event on the planet, and this success on the global stage is only possible because of the thriving school, university and club competitions in England and around the world.

One of the reasons for rugby's rapid growth is that regardless of size, shape, age or gender, there is a type of rugby and a level of competition that is right for almost everyone.

While the conventional 15-a-side version of the sport makes the headlines, sevens, and touch are also thriving across England and in schools.

**Famous Rugby Players – Maro Itoje**

Maro Itoje is a member of the Saracens and England Rugby squads. Maro captained the U20 England team to victory in the 2014 IRB Junior World Championship against a formidable South African team in a fierce contest held at Eden Park, New Zealand. In 2015 he was an integral part of the Saracens squad who lifted the Aviva Premiership Trophy. More recently he has been awarded his first senior caps for England in the 2016 6 Nations.

Key Words

Rucking



Jackling



Ball Presentation



Types of Passing



Key Words

Rucking



Jackling



Ball Presentation



Types of Passing



Rucking:

Ruck is a phase of play where one or more players from each team, who are on their feet, in physical contact, close around the ball on the ground.

Jackling:

Jackling is when the tackling player regains his feet and wins the ball, or the next defender in wins the ball.

Ball Presentation:

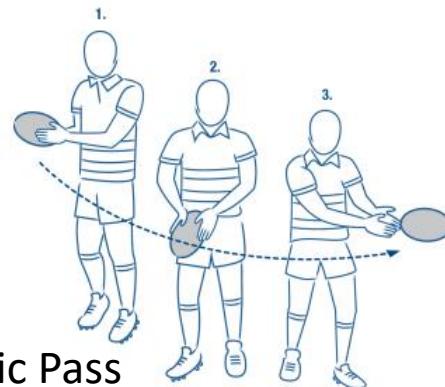
Ball presentation is how the ball-carrier makes the ball available to a teammate after they have been tackled.

Types of Passing:

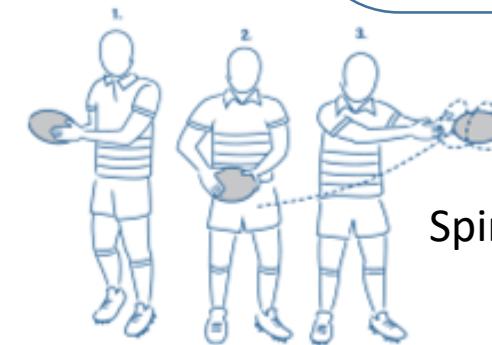
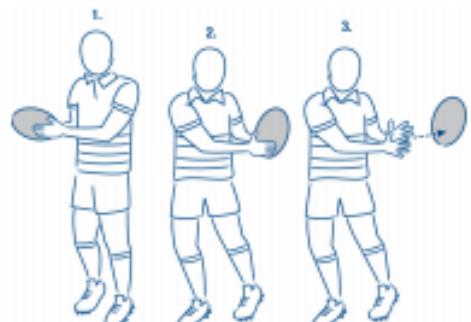
Basic Pass – When the goes across the body and backwards to another teammate.

Spin Pass – Allows the ball carrier to add more power onto the pass.

Pop Pass – A short pass that ‘hangs’ in the air for the teammate to run onto.



Pop Pass



Key Skills

- Passing – bounce, chest, shoulder
- Intercepting – anticipating where passes are going.
- Footwork - pivoting
- Movement – without the ball.
- Shooting
- Marking

Websites, further reading and local information.

Netball Rules - <http://www.simplenetball.co.uk/netball-rules/>

Northamptonshire Netball Clubs -

<http://www.northamptonshiresport.org/find-a-club?query=netball&type=&gender=&disability=&sport=&radius=20&location=NN5+5DW&submit=Filter>

England v Jamaica World Cup 2015 –

<https://www.youtube.com/watch?v=FXhuvZ2x9L8>

The Game of Netball

Netball is a ball sport played between two teams of seven players. The sport derived from early versions of basketball, and is similar to it in many respects. Netball developed as a distinct sport in the 1890s in England, from where it spread to other countries. It is popular in many Commonwealth nations and is predominantly played by women. Games are played on a rectangular court divided into thirds, with a raised goal at each short end. The object of the game is for teams to score goals, by passing a ball and shooting it into their team's goal ring. Players are assigned "positions" that define their role within the team and restrict their movement on court. During general play, a player with the ball can take no more than one step before passing it, and must pass the ball or shoot for goal within three seconds. Goals can only be scored by the assigned shooting players. Top level netball games are 60 minutes long and divided into 15-minute quarters, at the end of which the team with the most goals scored wins.

Famous Netball Players – Ama Agbeze

Ama is an English international netball player. Agbeze plays in the goal defence and goal keeper positions. She debuted in the England national squad in 2001 and became captain during the 2016 season. During her international career she won bronze playing for the English team during the 2006 Commonwealth Games.

Key Words

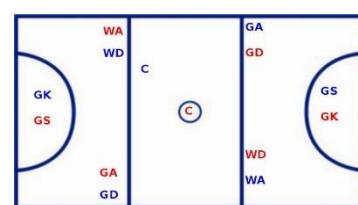
Footwork



Intercepting



Positions in Netball



Pivoting



Key Words

Footwork



Intercepting



Positions in Netball



Pivoting



Footwork

Footwork in **netball** applies when a player is stepping, landing and pivoting while in possession of the ball. A maximum of 2 steps is allowed before the ball must be passed.

Interception

Interception of the ball in **netball** is when a player regains possession of the ball during a pass by the opposition. It requires the player to anticipate where the opposition or ball is heading.

Positions in netball

Centre (C)
Wing Defence (WD)
Wing Attack (WA)
Goal Defence (GD)
Goal Attack (GA)
Goalkeeper (GK)
Goal Shooter (GS)

Pivoting

The **pivoting** action is a swivel movement that allows the player to move on a fixed axis to either pass or shoot.

Key Skills

- Passing – Variety of passes; short, long, driven, bounce, overarm.
- Intercepting – anticipating where the ball is going.
- Movement – with and without the ball.
- Catching – both hands and one hand.
- Shooting – high and low. Variety of speeds and angles.

Websites, further reading and local information.

Handball Rules

<http://www.sportsknowhow.com/team-handball/rules/team-handball-rules.html>

Handball Highlights

https://www.youtube.com/watch?v=lFhvnmX_aE

Olympic Handball

<https://www.olympic.org/handball>

The Game of Handball

Handball is a team sport played by two male or female teams. The players are allowed to handle and throw the ball using their hands, but they must not touch the ball with their feet. The objective of the game is to score and avoid getting goals. The team that scores more goals in a given period of time wins the match.

Handball is a hybrid game which has adopted aspects of its game from other well known sports – can you think of them?

Famous Handball Players - **Nikola Karabatić**

With the French national handball team, he has won two Olympic gold medals, which came in the Summer Olympics of 2008 and 2012, 4 World Championship gold medals, which came in 2009, 2011, 2015 and 2017 as well as three gold medals in the European Championship which came in 2006, 2010 and 2014. In addition, he also won L'Équipe Champion of Champions in 2011. He is regarded as one of the greatest players in Handball history and he was IHF World Player of the Year for a record three times, in 2007, 2014, and 2016.

Key Words

Passing



Defending



Goalkeeping



Shooting



Key Words

Passing – In handball, the perfect **pass** is not always possible due to many factors e.g.: Opposition players trying to stop the **pass**. Players need to be able to catch the ball from many situations:- Low. **pass**; High **pass**; Chest **pass**; in midair; from a bounce; from the ground

Defending – Defending in handball is strategically preventing the opposition gaining a clear sight on goal and denying goal scoring opportunities. Individual defending techniques include blocking and tackling, while this should be progressed into defending in units and as a team.

Goalkeeping – The goalkeeper's primary task is to prevent the other team from scoring a goal, which is achieved when the ball fully passes the goal line.

Shooting – shooting is the final part of the action and it aims at scoring a goal. Technically it is similar to passing, but the action is much more forceful and fast.

Key Skills

- Rolls – forward, backward, pencil and teddy bear.
- Balances – individual, paired and group.
- Counter Tension – paired and group
- Counter Balance – paired and group
- Travel – hopping, jumping, running, bounding
- Levels – high, low, medium
- Shapes – Tuck, pike, straddle.

Websites, further reading and local information.

Max Whitlock Rio 2016 -

<https://www.youtube.com/watch?v=zNluluv4eE0>

Northampton Gymnastics Club -

<http://www.ncaacgymnastics.com/>

The Health benefits of Gymnastics –

<http://www.healthfitnessrevolution.com/top-10-health-benefits-gymnastics/>

Gymnastics

Gymnastics is a fun and challenging sport that involves performing moves and exercises requiring physical strength, flexibility, power, agility, co-ordination, grace and balance.

Gymnastics at WPS will involve individual and group

Challenges. Team Gym will be heavily used on the curriculum which will encourage learners to work together and create routines.



Famous Gymnasts – **Max Whitlock**

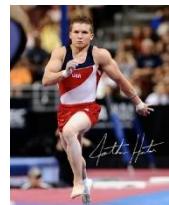
He is a five-time Olympic medallist (all around, team, floor exercise and twice on pommel horse), winning two golds and three bronzes, and a five-time world medallist on the same apparatus with one gold and four silvers. He became Britain's first ever gold medallist in artistic gymnastics when he won both the men's floor and pommel horse exercises at the 2016 Summer Olympics. With ten medals and three titles in Olympic and world championships, Whitlock is the most successful gymnast in his nation's history.

Key Words

Levels



Travel



Balance



Body Tension



Key Words

Levels



Travel



Balance



Body Tension



Levels:

Varying the movements across different heights, high, middle, low. These can be done by jumping or holding upright balances, or doing movements or balances on the floor.

Travel:

How you move around the space or between balances. Travelling can use your whole body and includes, rolling and jumping.

Balance:

Balances in gymnastics are designed to train the gymnast to find stability in several positions using different bases of support, such as one hand, two hands, one foot and two feet.

Body Tension:

Balances in gymnastics are designed to train the gymnast to find stability in several positions using different bases of support, such as one hand, two hands, one foot and two feet.



Key Skills

- Dodging
- Accuracy
- Awareness
- Throwing
- Catching



Dodgeball at Wootton Park School

Dodgeball is a team sport in which players on two teams try to throw balls and hit opponents, while avoiding being hit themselves. The objective of each team is to eliminate all members of the opposing team by hitting them with thrown balls, catching a ball thrown by an opponent, or inducing an opponent to commit a violation, such as stepping outside the court. At Wootton Park School, there will be opportunities throughout the year

Useful websites and links

<https://www.britishdodgeball.org/>

<https://www.englanddodgeball.com/>

<https://www.theukrules.co.uk/rules/sport/dodgeball/terminology.htm>

Key Words

Attack line

Catcher

Fault

Dead ball

Key Words

Attack line- Both teams have a attack line marked on their designated side of the court. Players can only shoot from behind an attack line.

Catcher- Dodgeball catchers need good hands and they need good hand-eye coordination. The catcher position is highly important because it creates a two-player swing:
It gets the thrower out.
It allows a teammate to re-enter the game.

Fault- A fault is any action (other than being hit) which results in a player being ruled out. Dodgeball faults include stepping over the attack line, going out of bounds, or repeatedly making high throws.

Dead ball- Thrown balls that hit the ground, the wall, other balls, or other objects before hitting the opponent are considered **dead** balls, and are ineligible to hit players out. You may block a thrown **ball** with a held **ball**.

Key Skills

- Passing – short, long, bounce, shoulder, overhead.
- Dribbling – using both hands.
- Shooting – lay ups, free throws, jump shots
- Defending – marking, full and half court press.
- Attacking.

The Game Basketball

A basketball team is comprised of 5 players. The aim of the game is to put the ball in the opposing team's basket. Players can pass the ball to each other and can move around any part of the court. They can also move with the ball by 'dribbling;' that is, by bouncing the ball at knee-height whilst standing still or travelling. The game is divided into four 10-minute periods known as 'quarters.' The team which has the most points by the end of the game wins.

Websites, further reading and local information.

Basketball Rules -

<https://www.breakthroughbasketball.com/basics/basics.html>

Steph Curry Motivational Video-

<https://www.youtube.com/watch?v=3N3MjUmSeJw>

Northampton Basketball Clubs –

<http://www.northantsbasketballclub.net/home.html>

Famous Basketballers – Steph Curry

He is an American professional basketball player for the Golden State Warriors of the NBA. Many players and analysts have called him the greatest shooter in NBA history. In 2014–15, Curry won the NBA Most Valuable Player Award and led the Warriors to their first championship since 1975. The following season, he became the first player in NBA history to be elected MVP by a unanimous vote and to lead the league in scoring while shooting above 50–40–90.

Key Words

Travelling



Double Dribble



Screening



Guarding



Key Words

Travelling



Double Dribble



Screening



Guarding



Travelling:

Travelling is a violation of the rules that occurs when a player holding the ball moves one or both of their feet illegally.

Double Dribble:

Once a player picks up his dribble by catching the ball with both hands, he must pass it or shoot it. The player cannot begin a second dribble after ending the first. If he begins a second dribble after voluntarily ending the first, he commits a double dribble violation.

Screening

A screen is a blocking move by an offensive player in which they stand beside or behind a defender in order to free a teammate to either shoot a pass or drive in to score.

Guarding:

Guarding is the act of legally placing the body in the path of an offensive opponent. There is no minimum distance required between the guard and opponent, but the maximum is 6 feet when closely guarded.

Subject: PE – Year 7

Term: 1-4

Topic: Badminton

Key Skills

- Serve
- Backhand
- Forehand
- Overhead Clear
- Drop Shot
- Smash

Websites, further reading and local information.Badminton in Northampton - <http://www.merewaybadminton.co.uk/>Best rallies at the Olympics -
<https://www.youtube.com/watch?v=6RqND3BAf1A>Badminton England - <https://www.badmintonengland.co.uk/>Badminton at Wootton Park School

Badminton is a racquet sport played using racquets to hit a shuttlecock across a net. Although it may be played with larger teams, the most common forms of the game are "singles" (with one player per side) and "doubles" (with two players per side). Each side may only strike the shuttlecock once before it passes over the net. Play ends once the shuttlecock has struck the floor or if a fault has been called by the umpire, service judge, or (in their absence) the opposing side. The shuttlecock is a feathered or (in informal matches) plastic projectile which flies differently from the balls used in many other sports. In particular, the feathers create much higher drag, causing the shuttlecock to decelerate more rapidly. Shuttlecocks also have a high top speed compared to the balls in other racquet sports. The flight of the shuttlecock gives the sport its distinctive nature.



Pusarla Venkata Sindhu (born 5 July 1995) is an Indian professional badminton player. Having made her international debut in 2009, she rose to a career high ranking of no. 2 in April 2017. Over the course of her career, Pusarla has won medals at multiple tournaments including Olympics and on the BWF circuit including a gold at the 2019 World Championships. She is the first Indian to become the Badminton World Champion.

Key Words

Disguise

Variety

Ready Position

Grip

Tramlines

Key Words

Ready position – the position in which you await the next shot from your opponent.

Variety – the use of different shots in a game situation e.g. Serve, smash, clear, drop.

Grip – a way of holding the racket in order to hit shots during a match.
The most used grip is the orthodox forehand grip.

Disguise – give your shot a different appearance in order to conceal its identity e.g.
feint a smash shot but playing a drop shot.

Tramlines – the singles side lines are not the outermost lines, but the next ones in.
Taken together with the outermost (doubles) side lines, these make narrow alley shapes along the sides of the court. These alleys are often called the tramlines.

Key Skills

- Running – short and long distances.
- Team work – pairs and groups.
- Determination – the desire to complete exercise and activities.
- Resilience – the desire to keep on going.
- Pulse rate – being able to take your pulse.
- Heart rate – understanding maximum heart rate.

Websites, further reading and local information.

Components of fitness - <https://www.brianmac.co.uk/conditon.htm>

Effects of training and exercise -

http://www.bbc.co.uk/schools/gcsebitesize/pe/exercise/2_exercise_effectsoftaining_rev1.shtml

Northampton Park Run - <http://www.parkrun.org.uk/northampton/>

Health-related Exercise

The definition of health-related fitness involves exercise activities that you do in order to try to improve your physical health and stay healthy, particularly in the categories of cardiovascular endurance, muscular strength, flexibility, muscular endurance and body composition.

Cardiovascular fitness is the ability to exercise the whole body for long periods of time and is sometimes called stamina.

Muscular strength is the amount of force a muscle can exert against a resistance. It helps sportspeople to hit, tackle and throw.

Muscular endurance is the ability to use voluntary muscles many times without becoming tired. It helps sportspeople to sprint or repeat quick actions for longer.

Flexibility is the range of movement possible at a joint. It helps performers to stretch and reach further.

Body composition is the percentage of body weight which is fat, muscle or bone. It helps sportspeople depending on the type of sport they play, e.g. heavy rugby players are more effective in the scrum than lightweight players, but light long distance runners will always beat heavyweights.

Marathon WR holder – Eliud Kipchoge is a Kenyan long-distance runner who competes in the marathon and formerly competed at the 5000 metre distance. He is the world record holder in the marathon with a time of 2:01:39, set on 16 September 2018, at the 2018 Berlin Marathon. His run broke the previous world record by 1 minute and 18 seconds. He has been described as "the greatest marathoner of the modern era".

Key Words**Cardiovascular Endurance****Muscular Strength****Muscular Endurance****Flexibility****Body Composition**

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Key Skills

- Passing – both feet. Long, short. Inside of the foot and outside.
- Dribbling – both feet and at speed.
- Shooting – both feet. Long and short shots.
- Tackling – safely and effectively (in game situations)
- Movement – with and without the ball, creating space..
- Positioning – defence and attack. Marking.

Websites, further reading and local information.

Football Rules -

http://news.bbc.co.uk/sport1/hi/football/rules_and_equipment/default.stm

England's u17 World Cup Triumph -

<https://www.youtube.com/watch?v=sRxsW91x0Rg>

Rugby Refereeing Hand Signals -

<https://www.youtube.com/watch?v=bfLZmDXQcUs>

The Game of Football

Football, also called association football or soccer, game in which two teams of 11 players, using any part of their bodies except their hands and arms, try to maneuver the ball into the opposing team's goal. Only the goalkeeper is permitted to handle the ball and may do so only within the penalty area surrounding the goal. The team that scores more goals wins. Football is the world's most popular ball game in numbers of participants and spectators. Simple in its principal rules and essential equipment, the sport can be played almost anywhere, from official football playing fields (pitches) to gymnasiums, streets, school playgrounds, parks, or beaches. Football's governing body, the Fédération Internationale de Football Association (FIFA), estimated that at the turn of the 21st century there were approximately 250 million football players and over 1.3 billion people "interested" in football; in 2010 a combined television audience of more than 26 billion watched football's premier tournament, the quadrennial month-long World Cup finals.



Famous Football Players – Marcus Rashford

Marcus Rashford is an English professional footballer who plays as a forward for Premier League club Manchester United and the England national team. A Manchester United player from the age of seven, he scored twice in both his first-team debut (UEFA Europa League) after the warm-up injury of striker Anthony Martial and in his first Premier League match in February 2016. He also scored in his first Manchester derby match, his first League Cup match, his first UEFA Champions League match, and on his England senior debut.

Key Words

Offside

Man-marking

Zonal marking

Jockeying

Positions

Key Words

Offside – A player is in an offside position if: any part of the head, body or feet is in the opponents' half (excluding the halfway line) and. any part of the head, body or feet is nearer to the opponents' goal line than both the ball and the second-last opponent.

Man-marking – a defensive strategy where defenders are assigned a specific opposition player to mark rather than covering an area of the pitch.

Zonal marking – a defensive strategy where defenders cover an area of the pitch rather than marking a specific opponent.

Jockeying – (also called “shepherding” or "guiding") is the defender's skill of keeping between the attacker and his or her intended target (usually the goal).

Positions – each of the 11 players on a team is assigned to a particular position on the field of play. A team is made up of one goalkeeper and ten outfield players who fill various defensive, midfield, and attacking positions depending on the formation deployed.